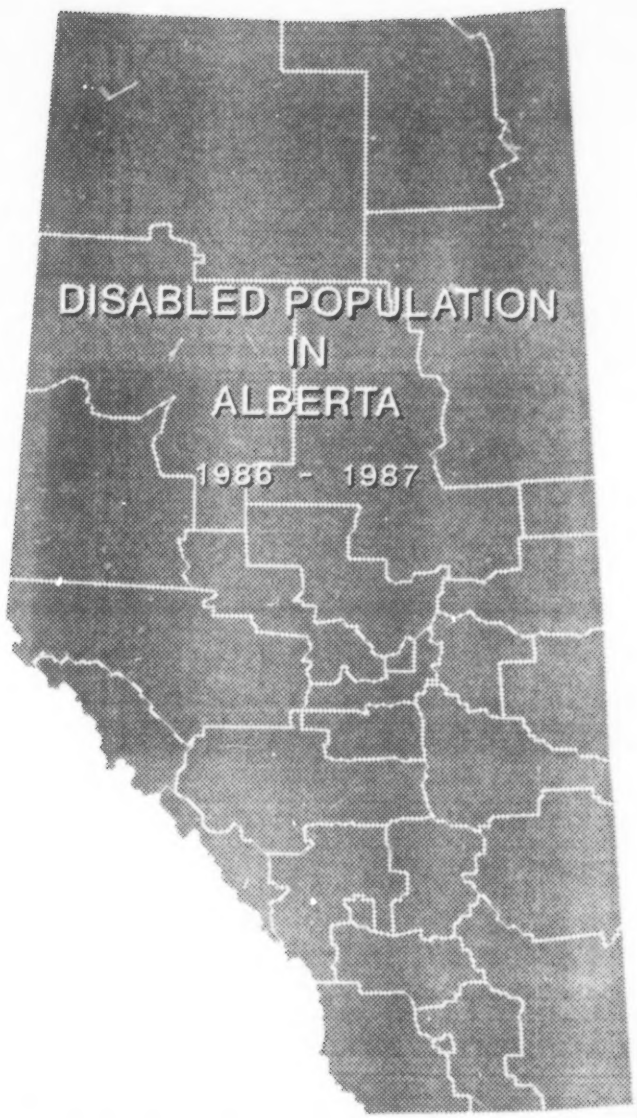

Alberta
HEALTH

DISABLED POPULATION IN ALBERTA

1986 – 1987

Health Economics and Statistics Branch
Policy & Planning Services Division
Alberta Health

May, 1990

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HIGHLIGHTS

The purpose of the report entitled **Disabled Population in Alberta, 1986-1987** is to provide estimates of the prevalence of disability in Alberta based on preliminary data from a 1986-1987 Health and Activity Limitation Survey (HALS), published by Statistics Canada (1988). Highlighted below are some of the major findings.

During the 1986-1987 period:

- 11.9% of the Alberta population was reported to have experienced some level of disability, while 13.2% was the corresponding figure for Canada.
- About 7.5% of the total disabled population in Alberta and Canada resided in health care institutions.
- Disability prevalence rate in Alberta and Canada was approximately 5-6% of the population aged 0 to 34. The rate tripled to 14% to 16% among 35 to 64 year olds, and tripled again to 44% to 49% among the 65+ age group.
- The majority of the institutionalized disabled population in Alberta and Canada was in the 65+ age category. Most of these persons were women.
- Alberta, along with Quebec had the highest rate of institutionalization of disabled seniors among the Canadian provinces.
- The most common disabilities reported in the survey were limitations in mobility, agility, and hearing.
- About 50% of Alberta's reported disabled population were employed, while Canada had 41% of the disabled population employed.

1 INTRODUCTION

Information on the nature and severity of disabilities[1] experienced by Albertans and the barriers which disabled children, adults, and seniors face in the conduct of their everyday activities is of central importance in maintaining and improving the health status of Albertans. The purpose of this report is to provide estimates of the prevalence of disabilities in the province of Alberta based on preliminary data from a 1986-87 Health and Activity Limitation Survey (HALS), published by Statistics Canada (1988). It is hoped that this report will serve as a foundation for policy and program planning and for more detailed epidemiological studies of long term disability.

The following sections 2 and 3 present the background of the survey and briefly describe the methodology and technique of data collection employed in the HALS survey. In Section 4, estimates of the prevalence of disabilities among Albertans are compared with nationally produced estimates. Sections 5 and 6 present detailed tabulations from the HALS survey for Alberta and its subprovincial areas. In the final section, some of the limitations of the survey are noted and suggestions for analysis of micro-level data are given.

2 BACKGROUND OF THE SURVEY

The Health and Activity Limitation Survey (HALS) which was conducted by Statistics Canada was comprised of two segments: the Household Survey completed by households in the fall of 1986, and the Institutions Survey conducted among residents of institutions during the spring of 1987. The major objective of the survey was to collect information on the nature, severity and prevalence of disabilities among the Canadian population. The primary focus was on the barriers faced by disabled persons in their day-to-day functioning in the home or on the job.

Statistics Canada conducted the HALS survey in response to a request from the Special Parliamentary Committee on the Disabled and the Handicapped. The intent was to assist the Committee in developing and implementing a long-term strategy by providing comprehensive information on disabled persons across Canada. A national data base on all types of disability arranged by geographic area was developed.

3 SAMPLE DESIGN AND DATA COLLECTION/ESTIMATION PROCEDURES

As noted, the HALS survey was a national survey conducted in two segments, the first among households, the second among residents of health-care institutions. The sample employed during the first phase or Household Survey was a multi-stage stratified design developed from information collected in the 1986 Census of Population. The target population for the survey represented three broad age-groups: under 15 years of age, 15 to 64 years of age, and 65 years of age and older.

3.1 Survey Method/Sample Design

Personal interviews were conducted with approximately 120,000 individuals who had responded "Yes" to a question on activity limitation included in the detailed Census Ques-

---

[1]See Note 1 for definition of disability.

tionnaire (2B, 20% sample). In an attempt to improve estimates at the provincial and metropolitan levels, telephone interviews were conducted with a further 80,000 individuals who had responded "No" to the Census question. In the case of children (persons under the age of 15), parents and/or guardians were interviewed. The types of data collected during the Household Survey were varied by age-group and classified as follows (Statistics Canada, 1988: page 5-6):

i) Children aged 0 through 5 inclusive:

Identification of the nature of the disability,

ii) Children aged 6 through 14 inclusive:

Identification of:

- type of disability through questions on:
  - technical aids used
  - list of chronic health problems
  - vision and/or hearing problems
  - general limitation as a result of physical, emotional or psychological problems, and
  - questions to identify learning disabilities,
- barriers encountered in education, transportation, accommodation and physical activities,
- out-of-pocket expenses incurred as a result of the child's disability,

iii) Persons aged 15 and older:

Identification of:

- the nature and severity of the disability through questions concerning activities of daily living, which identify limitations as a result of
  - physical, emotional, or psychological condition or health problem,
  - learning disabilities, (questions to identify adults with such)
- technical aids used and/or needed,
- support used and/or required to perform everyday activities such as preparing meals, shopping for groceries, etc.,
- the underlying health problem (coded using the International Classification of Diseases — 9th Edition),
- barriers encountered in education, employment, accommodation, transportation, and leisure activities,
- out-of-pocket expenses incurred and income received as a result of the individual's disability.

In the second phase of Institutions Survey of HALS, the 1986 Census of Population was used in locating information regarding residents of institutions. From a comprehensive listing of institutions, five types were chosen for inclusion in HALS. These were: orphanages and children's homes, special care homes and institutions for the elderly and chronically ill, general hospitals, psychiatric institutions, and treatment centres and institutions for the physically handicapped. Selections based on the type and size of an institution (i.e., number of permanent residents at the time of the census) were made and a sample of residents was chosen for interviews from within each institution. Personal interviews (or proxy interviews with staff members or next-of-kin, if individuals were unable to respond) followed. The types of data collected on children aged 6 to 14 years and adults aged 15 years and older during phase two were similar in nature to the data on households recovered during phase one. For children aged 0 to 5 years inclusive, the data collected were limited to the nature of the disability.

3.2 Estimation Procedure

Statistical reliability of estimates are not included in the report, however the procedure for calculations to determine the approximate coefficient of variation of an estimate and of a difference of two estimates are included in Appendix B along with "look up" tables, referred to as Sampling Variability Tables for Canada and Alberta.

The intent of the report was not to highlight differences in estimates but to indicate possible areas of attention for further research. Given the complex methodology used in the survey, only the HALS Project team of Statistics Canada can really answer questions as to whether observed differences shown in this report are statistically significant.

3.3 Data Quality/Limitation

It is recognized that the flaws inherent in any survey place some limitations on the use of the estimates obtained. Statistics from the HALS data base are estimates based on a sample survey of a portion of the Canadian population (approximately 1 out of every 25 persons) who answered "Yes" in the census question pertaining to disability and 1 out of every 300 persons who answered "No." As a result, the statistics are subject to two types of errors: sampling and non-sampling error. Sampling error is partly overcome by increasing the size of the sample. Non-sampling errors include observation, response, processing and non-response errors, and are more difficult to detect or remedy after the survey. Given these types of errors the results shown in this report should be interpreted with due caution.

As noted by Statistics Canada, some data have been suppressed because the number estimated had a coefficient of variation exceeding 25%. Nevertheless, as will be shown in this report, there are about 249,300 disabled adults in Alberta and of these approximately 62% have multiple disabilities. More importantly, it should be noted that almost 20% disabled seniors in Alberta reside in health-care institutions, therefore, Alberta ranks among the highest of the provinces and territories for institutionalizing disabled seniors.

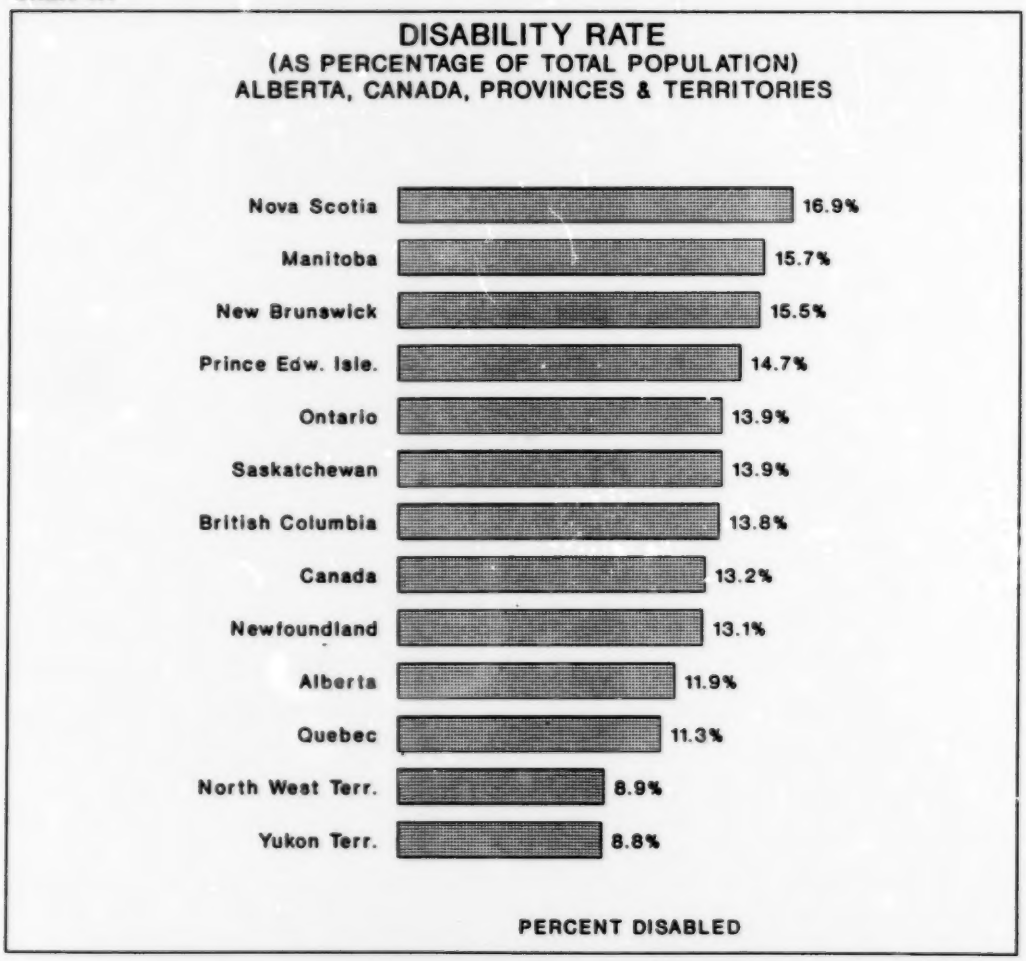
4 ESTIMATES OF THE PREVALENCE OF DISABILITY IN ALBERTA, 1986-87

4.1 Prevalence of Disability Among the Canadian Population

In total, an estimated 3,316,870 Canadians (13.2%) experienced some level of disability (see Chart 4.1). Nova Scotia, Manitoba, and New Brunswick had the highest disability rates, at 16.9%, 15.7%, and 15.5% respectively. Alberta (11.9%) and Quebec (11.3%) had rates slightly below the national level. The lowest rates were for the Yukon and the Northwest Territories with 8.8% and 8.9% respectively. The lower rates shown for the two territories are due to the age structure of their populations. While 10.7% of Canada's population was 65 years of age and older, the respective, corresponding figures for Yukon and the Northwest Territories were 3.7% and 2.8% at the time of the survey.

The lower rates shown in Alberta were consistent with the relatively smaller percentage (8.1%) of seniors residing in the province. In contrast, the corresponding percentages of age 65+ residents, 11.9%, 11.1% and 12.6% respectively for Nova Scotia, New Brunswick and Manitoba are consistent with the greater disability rates found for these provinces.

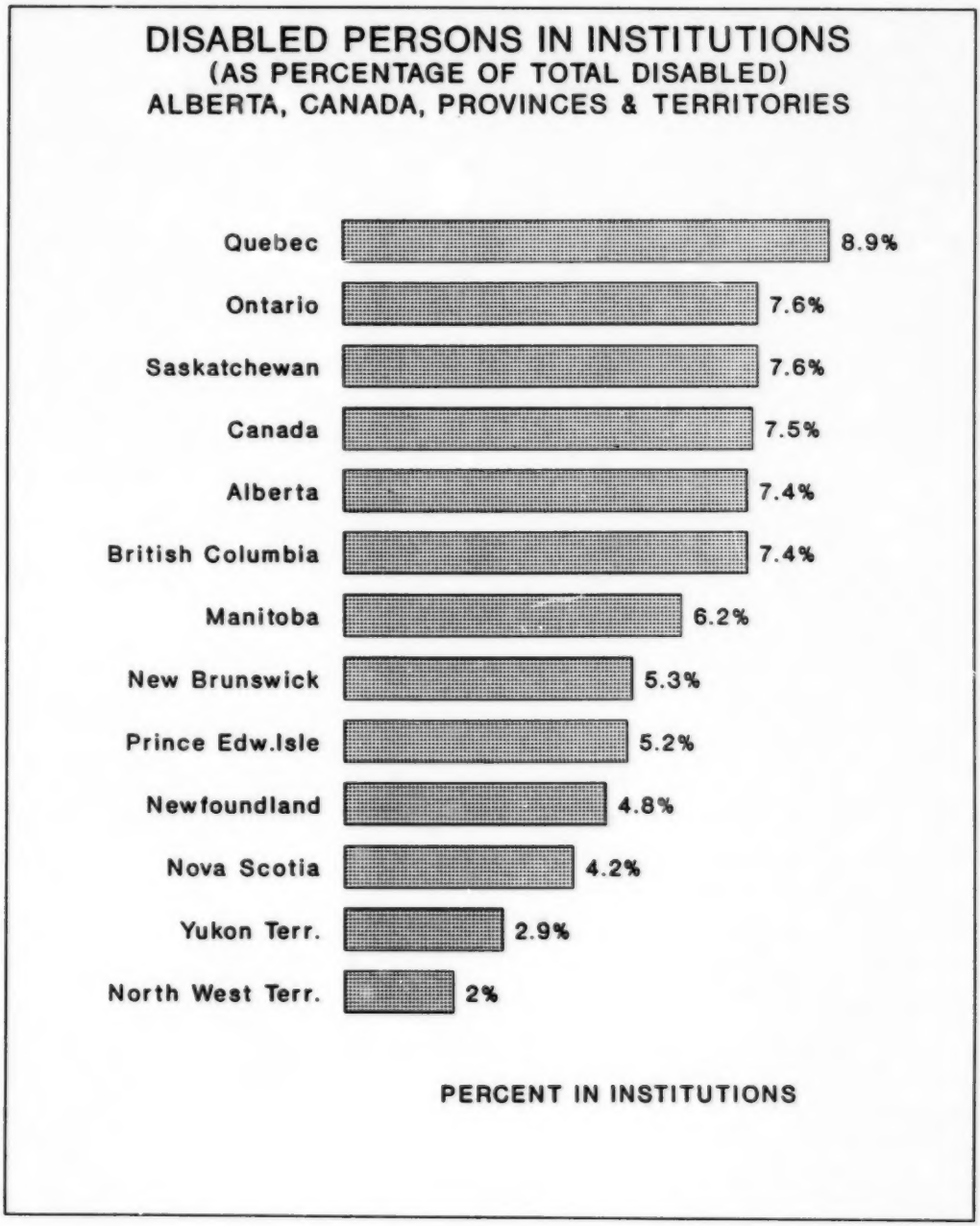
Chart 4.1



4.2 Disabled Albertans in Health-Care Institutions

Disabled persons residing in special care institutions and homes for senior citizens accounted for 7.4% of the disabled population in Alberta (see Chart 4.2). This mirrors the national rate of 7.5%, as well as that for Ontario, Saskatchewan, and British Columbia, (7.6%, 7.6%, and 7.4% respectively). The highest rate reported was 8.9% for Quebec and the lowest was 2.0% for the North West Territories.

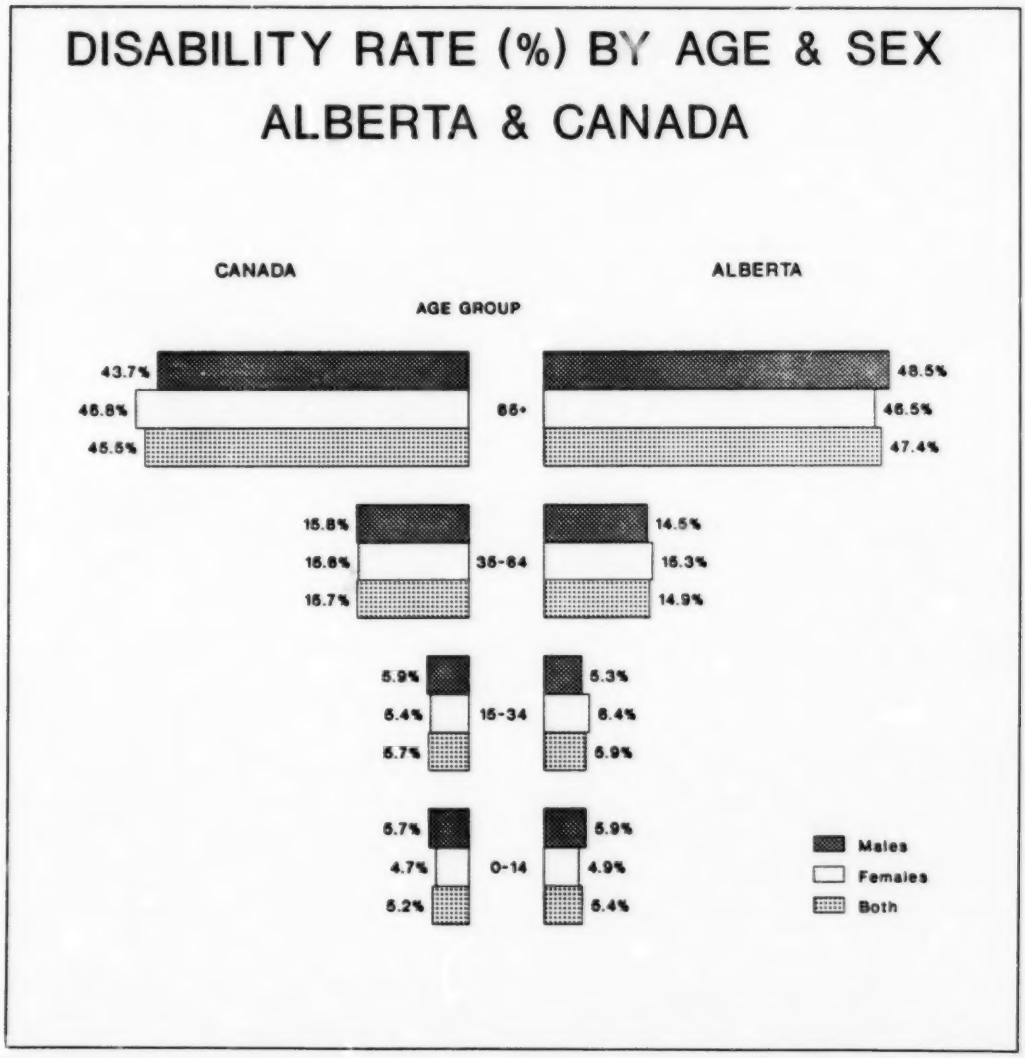
Chart 4.2



4.3 Disability in Alberta and Canada by Age and Sex

The disability prevalence rate in Alberta was reported to be 5.4% among children under 15 years (see Chart 4.3). The rate for this age category was higher for males (5.9%) compared to females (4.9%). Similar figures were observed at the national level. For the 15 to 34, and 35 to 64 year age categories, the Alberta and Canada figures appeared to mirror each other except that Alberta female disability prevalence rate appeared slightly higher than the corresponding Alberta male rates. Overall the rates appear to triple for the 35-64 year age group, from around 5 to 6% for 15 to 34 year olds to 15 to 16% for 35 to 64 year olds. The figures triple again for the 65+ age category to about 45% to 46%. The Alberta disability prevalence rate for seniors (47.4%) is a little higher than the national rate (45.5%) due mainly to the higher Alberta 65+ male disability rate (48.5%), which is almost 5% higher than the corresponding national rate.

Chart 4.3



4.4 Disabled in Institutions by Age and Sex

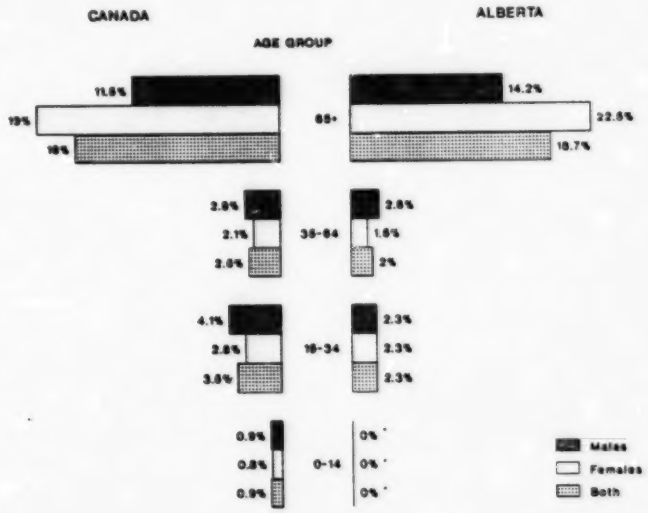
As Chart 4.4 indicates, the percentage of disabled children under 15 in Alberta, residing in institutions, was reported as a number too small to be expressed, while the corresponding national figure is a little below 1%. As for the 15 to 34 year age category, Alberta had a lower percentage of disabled persons in institutions when compared to Canada. Among 35 to 64 year olds residing in institutions, Alberta and Canada figures appeared to mirror each other with slightly more institutionalized males than females. Among Alberta seniors (65+) a higher percentage were institutionalized (14.2% males and 22.5% females) in comparison with national averages (11.5% males and 19.0% females). Percentages of 65+ females residing in institutions were greater than the corresponding male figures for both Alberta and Canada. Furthermore, it should be noted that the proportion of the Alberta population 65+ was smaller (8.1%) than that observed nationally (10.7%).

Chart 4.4

DISABLED IN INSTITUTIONS BY AGE AND SEX

AS PERCENTAGE OF TOTAL DISABLED

ALBERTA & CANADA



* figures are too small to be expressed, rounded to zero

4.5 Disabled Seniors in Canadian Institutions

Chart 4.5 indicates that the number of disabled seniors in institutions as a percentage of the total disabled seniors varied considerably among the provinces. Alberta and Quebec had the highest percentages at 18.9%. Lower rates were observed for Newfoundland, Prince Edward Island, and Nova Scotia (10.0%, 9.0%, and 8.7% respectively). A higher percentage (22.5%) of disabled female seniors were reported to be institutionalized in Alberta compared to (14.5%) males. The Alberta rate for institutionalization of disabled senior females was the highest observed among the provinces and territories. The second highest rate occurred in Quebec (21.7%). Furthermore, the percentage of institutionalized disabled seniors of either sex was higher in Alberta (18.9%) than the national figure of 16.0%.

Chart 4.5

4.6 Disabled Seniors in Institutions by Age and Sex

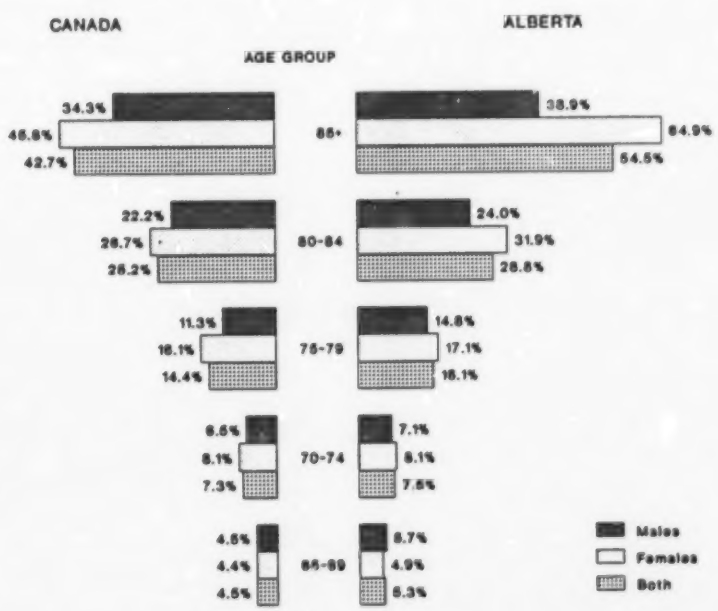
Slightly more than half (54%) the disabled Albertans 85 years and older resided in health-care institutions compared with a rate of 42.7% in Canada (see Chart 4.6). This pattern was observed for both males and females. The percentages among other age-groups, namely 65-69, 70-74, 75-79 and 80-84 years of age were also slightly higher in Alberta than in Canada. It would appear that disabled senior Albertans (65 years and older) were more likely to be institutionalized in comparison with the national average.

Chart 4.6

DISABLED SENIORS IN INSTITUTIONS BY AGE AND SEX

AS PERCENTAGE OF TOTAL DISABLED

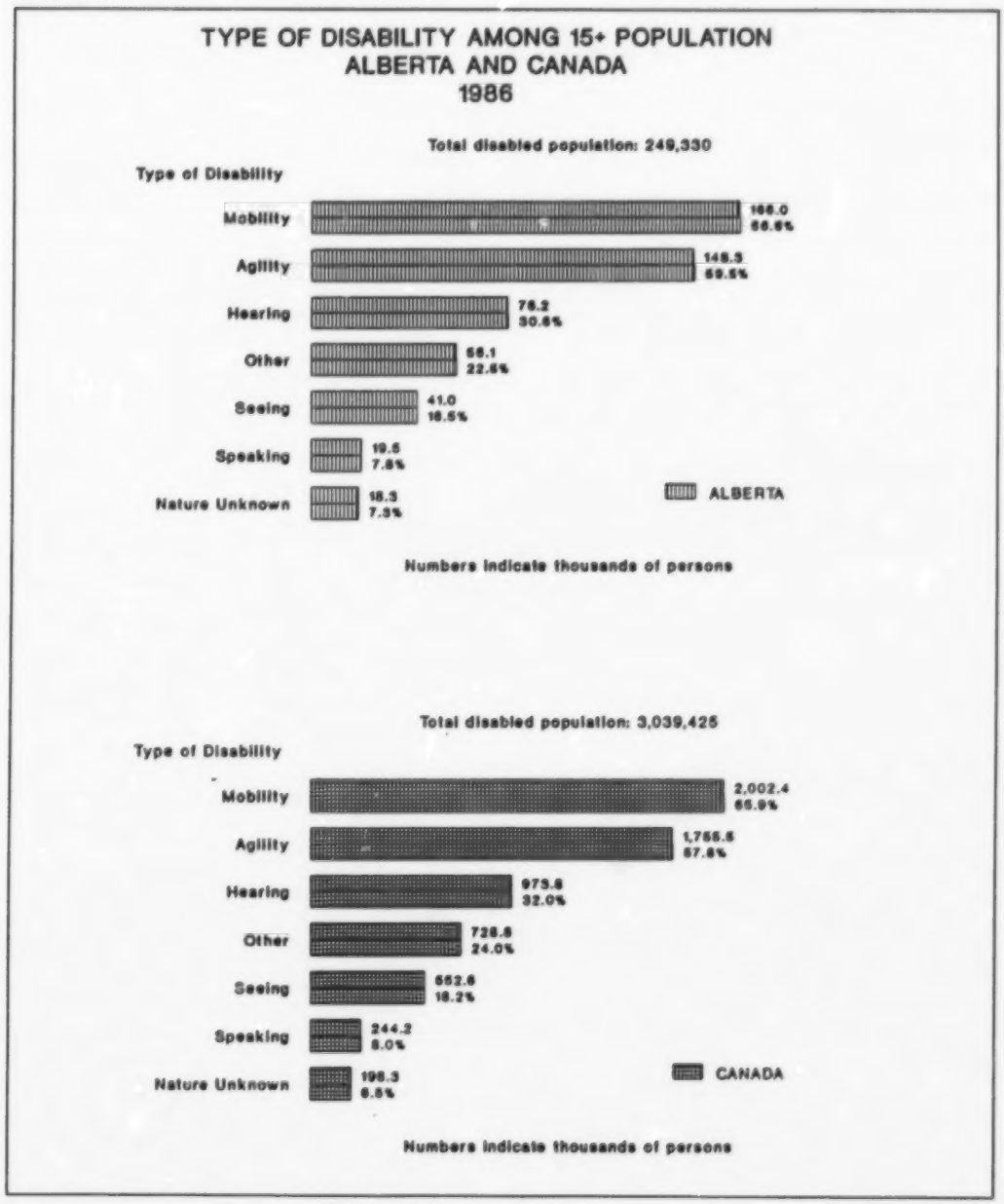
ALBERTA & CANADA



4.7 Types of Disability among Albertans and Canadians[2]

Chart 4.7 presents estimates of the number of disabled adults in Alberta and Canada by type of disability. Mobility disabilities were reported by 66.6% of the disabled population aged 15 years and older in Alberta, mirroring the rate of 65.9% reported nationally. Lack of agility was the second most frequent category observed and occurred among 59.5% of the disabled populations in Alberta and 57.8% of the disabled population in Canada.

Chart 4.7

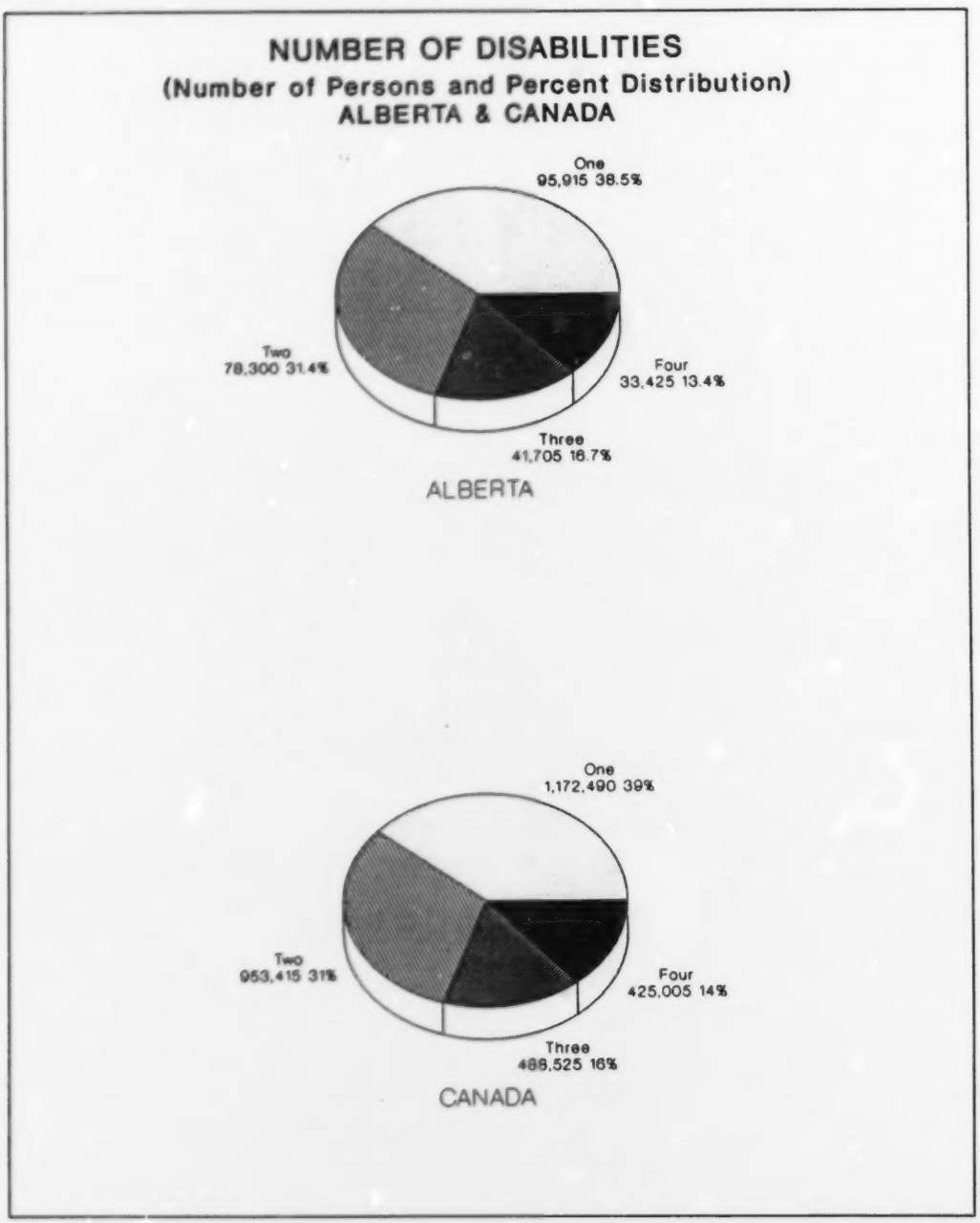


[2]See Note 2 for definition of nature of disability.

4.8 Multiple/Single Disability

Two-thirds of the disabled population in both Alberta and Canada reported having more than one type of disability (see Chart 4.8). The percentage of the disabled population in Alberta having multiple disabilities as opposed to single disabilities was 61.5%, comparable to the Canadian figure of 61.0%. The distribution of multiple and single disabilities was generally similar for Canada and Alberta.

Chart 4.8

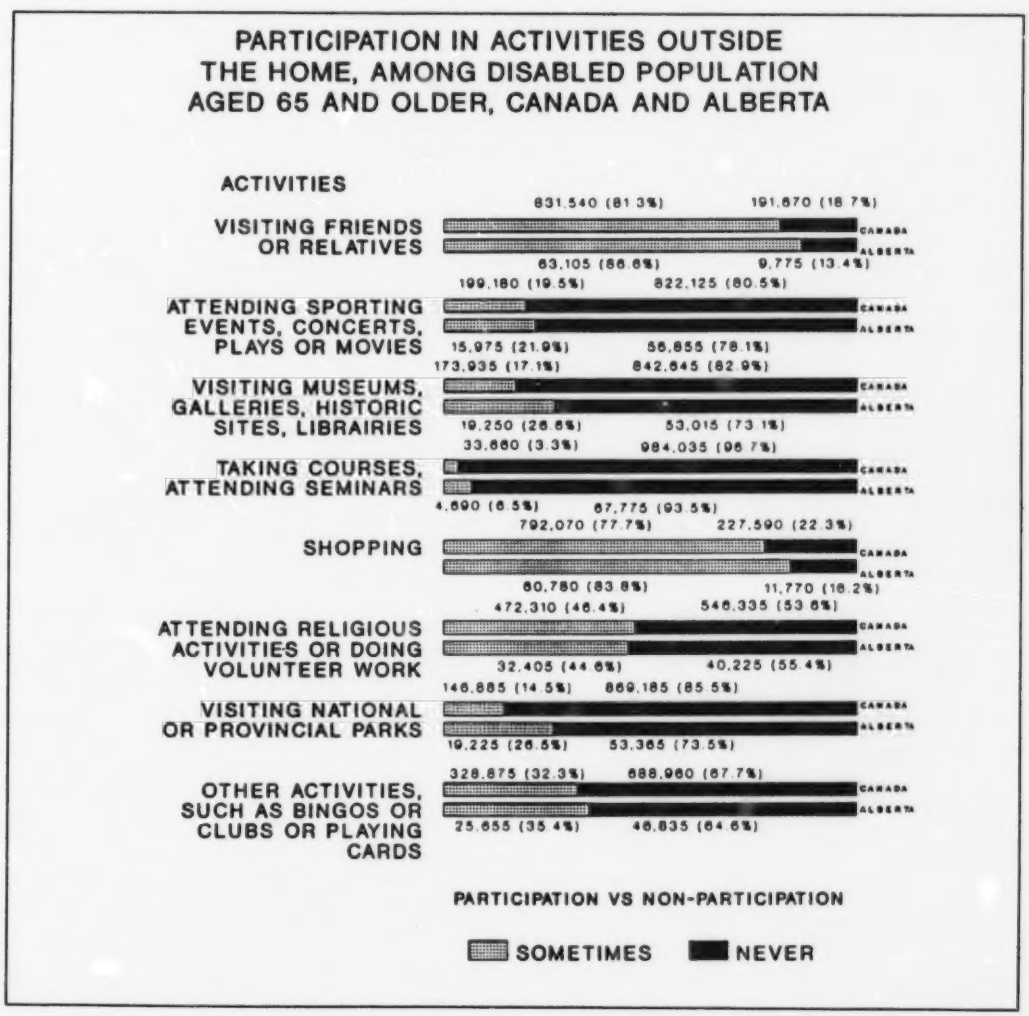


4.9 Participation in Activities Outside the Home by the Disabled

Data concerning participation and non-participation in activities outside the home among disabled seniors are presented in Chart 4.9. 86.6% and 81.3% of Albertans and Canadian disabled seniors, respectively, reported that they participated in visiting friend or relatives at least sometimes. Shopping ranked second most participated in with figures of 83.8% and 77.7% respectively for Alberta and Canada. The third and fourth ranking activities were attending religious activities or doing volunteer work (44.6% and 46.4% for Alberta and Canada respectively), and activities such as bingos, social clubs or playing cards ((35.4% and 32.3% for Alberta and Canada, respectively). The least participated activity was taking courses or attending seminars (6.5% and 3.3% for Alberta and Canada respectively).

Participation in activities outside the home appeared to be higher among disabled Albertans compared to Canadians at large for all activities given on Chart 7 except for "attending religious activities or doing volunteer work."

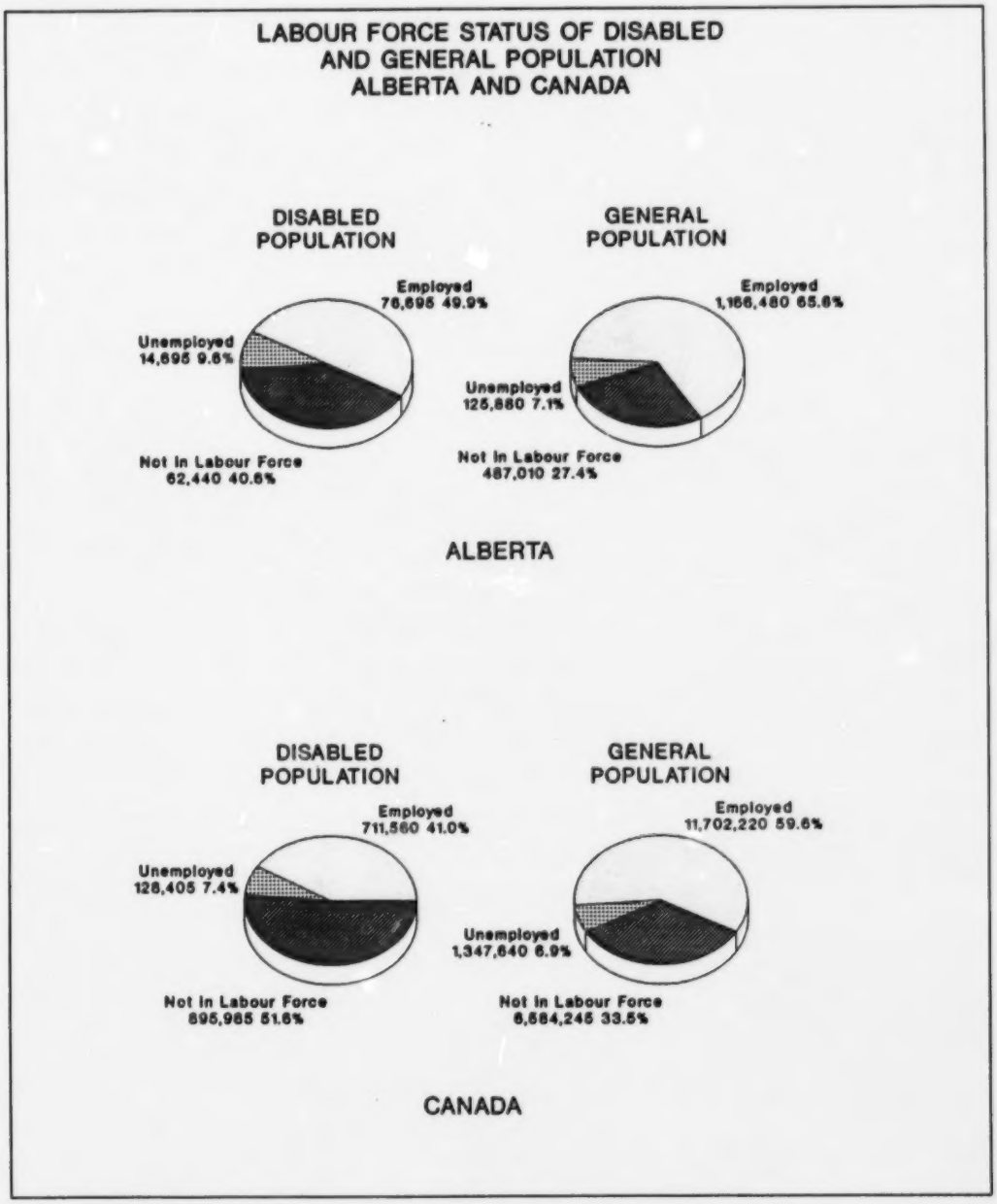
Chart 4.9



4.10 Labour Force Participation by the Disabled

Data concerning the work status of both the disabled and general populations of Alberta and Canada are presented in Chart 4.10. The percentage of disabled persons in the labour force was higher in Alberta than in Canada. Nearly half of disabled Albertans (49.9%) were employed, compared to a rate of 41.0% nationally. The higher level of labour force participation among the disabled in Alberta is consistent with the relatively higher percentage of employed adults in the province.

Chart 4.10



5. THE PREVALENCE OF MORE SEVERE DISABILITY AMONG PROVINCIAL AND SUBPROVINCIAL POPULATION

A more detailed description of the disabled population of Alberta was prepared during the HALS survey and involved that part of the sample from the Household Survey who had responded "Yes" to the 1986 Census disability question and "yes" to one or more of the detailed screening questions asked in the Health and Activity Limitation Survey (HALS) to identify the nature and severity of the disability(ies). These disabled persons represent, in general, the more severely disabled population in each of the selected subprovincial areas. It is these more severely disabled persons who experience more barriers during the conduct of their everyday activities. The data which follow are based upon replies by the more severely disabled population of Alberta and provide minimum estimates concerning prevalence of disability in the province and subprovincial areas.

5.1 Subprovincial Areas of Alberta

Figure 5.1 is a map of census division and municipalities of Alberta 1986 census. The attached legend identifies the subprovincial areas selected for HALS by Statistics Canada. For the purposes of the following two sections, the 22 subprovincial areas reported by Statistics Canada have been further aggregated into 10 larger regions and use of the term "subprovincial area" retained.

The reasons for combining the small subprovincial regions into larger areas are twofold:

1 Given the smallness of sample, some of the small subprovincial estimates were unreliable.

2 The population base for some of the smaller areas could not be accurately estimated, thereby preventing the calculation of prevalence estimates.

LEGEND:

(Formula for Subprovincial Areas)

1. North	= SPA (19+20+21+22)	= CD 12+13+16+17+19
2. North Central	= SPA (13+14+15+16+17)	= CD 10 + C11 – Edmonton
3. Central West	= SPA (11)	= CD 9+14+15+18
4. South Central	= SPA (9+10+12)	= CD 5 + (6–Calgary) + (8–Red Deer)
5. South East	= SPA (6+7+8)	= CD (1–Medicine Hat) + (2–Lethbridge) +3+4+7 + I.D. 4 + I.D. 6 + Crowsnest Pass
6. Edmonton	= SPA (02)	
7. Calgary	= SPA (01)	
8. Lethbridge	= SPA (03)	
9. Medicine Hat	= SPA (04)	
10. Red Deer	= SPA (05)	

Figure 5.1

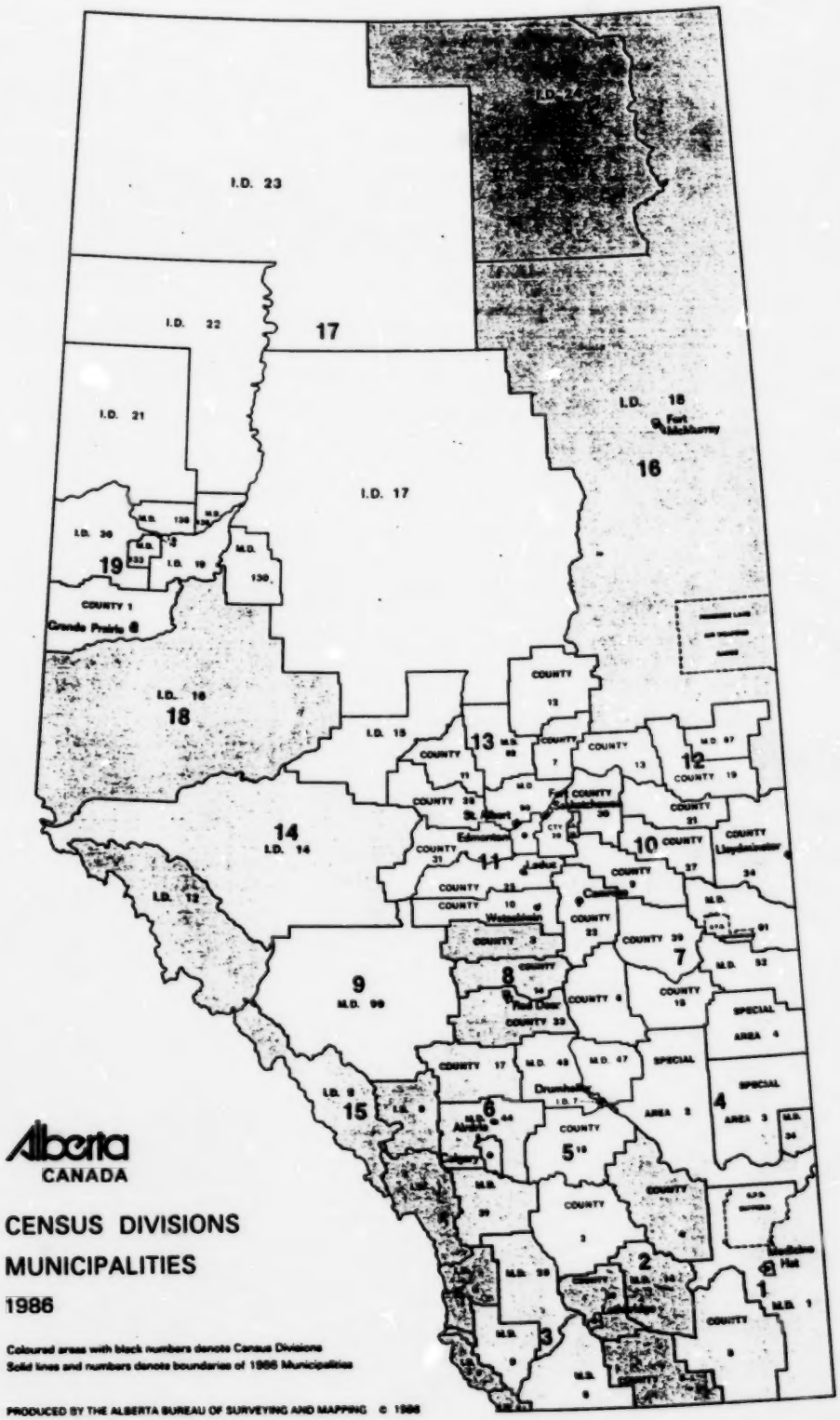

I.D. 23
I.D. 22
I.D. 21
I.D. 17
I.D. 18
Fort McMurray
I.D. 30
I.D. 19
I.D. 15
I.D. 16
I.D. 12
I.D. 14
I.D. 6
I.D. 7
I.D. 8
I.D. 9
I.D. 10
I.D. 11
I.D. 13
17
16
19
18
14
9
15
6
5
4
3
2
1
12
13
10
11
7
8
Alberta
CANADA
CENSUS DIVISIONS
MUNICIPALITIES
1986
Coloured areas with black numbers denote Census Divisions
Solid lines and numbers denote boundaries of 1986 Municipalities
PRODUCED BY THE ALBERTA BUREAU OF SURVEYING AND MAPPING © 1986

Figure 5.2

SUB-PROVINCIAL AREAS SELECTED FOR HEALTH ACTIVITY LIMITATION SURVEY

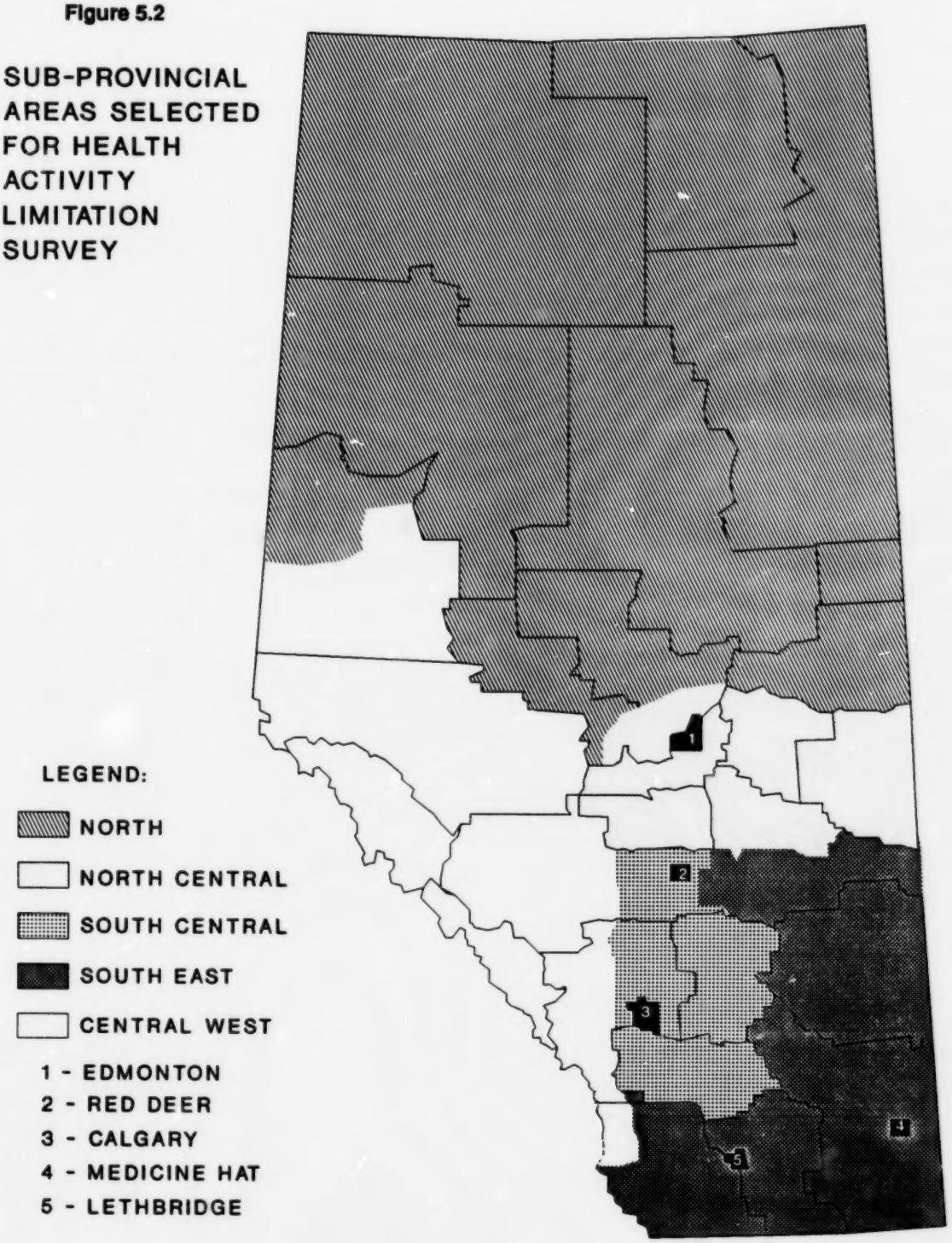


Figure 5.2 shows the health unit boundaries superimposed on the subprovincial regions.

5.2 Age-Sex Distributions of More Severely Disabled Population

Table 5.2 shows the percentages with subprovincial and age/sex breakdown, of more severely disabled population in Alberta. The age-sex distribution of disabled persons revealed that the prevalence of more severe disability increased with age. On the basis of the percentages shown for each of the subprovincial areas, less than 10% of the population 15 years of age and older were disabled in comparison with over 25% of the population 65 years and older.

Among seniors (65+), a greater proportion of males were reported to be more severely disabled in all regions of the province with the exception of the subprovincial areas of Edmonton and Lethbridge.

While larger numbers of disabled persons occurred in the metropolitan areas of Edmonton and Calgary, the highest percentage of disabled persons within a regional population occurred in the North subprovincial area (7.6%). This result was also maintained in age-sex comparisons among Alberta seniors (aged 65 years and older). Nearly one third (29.7%) of males age 65 years and older and 28% of females of the same age group were disabled in the North subprovincial area. The lowest percentage was reported for the subprovincial area of Lethbridge (19.9%).

Table 5.2

PERCENTAGE OF PERSONS IN MORE SEVERELY DISABLED CATEGORY, BY AGE AND SEX ALBERTA AND SUBPROVINCIAL AREAS

	North Central	Central West	South Central	South East	North	Calgary	Edmonton	Lethbridge	Medicine Hat	Red Deer	Alberta
Both sexes, Total	6.5%	6.0%	7.1%	7.3%	7.6%	5.9%	7.3%	6.8%	7.2%	7.0%	6.7%
0-14	1.8%	1.5%	1.9%	1.7%	1.5%	2.0%	2.1%	1.6%	1.9%	2.1%	1.8%
15-34	3.3%	3.1%	3.2%	2.6%	3.3%	3.3%	3.3%	3.7%	2.7%	4.1%	3.3%
35-44	5.3%	5.1%	5.0%	5.6%	5.1%	5.0%	8.0%	3.1%	5.6%	6.2%	5.9%
45-54	8.3%	9.9%	8.2%	11.0%	11.7%	6.9%	9.4%	8.5%	8.4%	10.8%	8.8%
55-64	20.0%	18.3%	18.2%	16.9%	20.9%	14.3%	17.6%	16.2%	17.5%	20.1%	17.4%
65-74	24.3%	23.9%	25.3%	25.2%	28.1%	23.0%	22.2%	15.0%	21.8%	25.6%	23.6%
75 years and over	25.5%	34.5%	28.7%	29.6%	29.8%	30.9%	33.0%	26.6%	20.8%	23.4%	29.7%
15 years and over	8.2%	7.6%	8.9%	9.4%	8.8%	7.0%	8.6%	8.2%	8.7%	8.5%	8.2%
65 years and over	24.8%	27.9%	26.5%	26.9%	28.8%	26.0%	26.4%	19.9%	21.4%	24.7%	26.0%
Males, Total	6.7%	6.6%	7.2%	7.5%	7.1%	5.8%	7.3%	5.6%	6.9%	7.0%	6.7%
0-14	1.7%	1.8%	-	-	-	2.1%	-	-	-	2.5%	2.0%
15-34	3.9%	3.2%	2.9%	3.0%	3.5%	3.3%	3.4%	3.5%	2.2%	4.5%	3.4%
35-44	5.1%	6.9%	5.1%	5.9%	6.1%	4.9%	8.2%	-	-	5.5%	5.9%
45-54	8.7%	9.7%	7.6%	10.7%	13.3%	7.6%	9.2%	7.1%	-	11.6%	9.1%
55-64	19.2%	21.3%	20.4%	17.9%	21.6%	13.8%	21.5%	14.2%	18.5%	19.9%	18.6%
65-74	25.7%	21.7%	26.2%	26.4%	29.7%	25.3%	22.1%	13.5%	21.6%	27.5%	24.7%
75 years and over	22.1%	39.9%	32.0%	30.1%	29.9%	32.5%	33.1%	19.4%	22.5%	-	30.5%
15 years and over	8.5%	8.2%	8.9%	9.6%	9.2%	6.8%	8.7%	6.8%	8.2%	8.4%	8.2%
65 years and over	26.3%	28.7%	28.5%	27.8%	29.7%	27.7%	25.9%	15.9%	21.9%	25.7%	26.8%
Females, Total	6.2%	5.4%	7.0%	7.2%	8.3%	6.1%	7.3%	7.8%	7.6%	7.0%	6.6%
0-14	1.1%	-	-	-	-	1.8%	-	-	-	-	1.7%
15-34	2.7%	3.1%	3.5%	-	3.0%	3.1%	3.2%	3.8%	3.2%	3.8%	3.1%
35-44	5.5%	3.0%	5.0%	-	6.1%	5.1%	7.8%	-	6.1%	7.1%	5.8%
45-54	6.5%	10.0%	8.8%	11.3%	9.8%	6.1%	9.6%	9.8%	9.7%	10.0%	8.5%
55-64	20.8%	14.8%	15.9%	15.8%	20.2%	14.8%	13.9%	18.0%	16.5%	20.2%	16.1%
65-74	22.8%	25.7%	24.4%	24.1%	26.5%	21.2%	22.4%	16.2%	21.6%	24.0%	22.7%
75 years and over	22.7%	29.6%	25.7%	29.2%	29.7%	30.0%	33.0%	31.4%	19.6%	24.0%	29.2%
15 years and over	8.0%	6.9%	8.8%	9.2%	8.3%	7.2%	8.6%	9.5%	9.3%	8.5%	8.1%
65 years and over	23.4%	27.1%	24.9%	26.2%	28.0%	24.9%	26.8%	22.9%	20.8%	24.0%	25.4%

Data Source: (1) Statistics Canada (1988) The Health and Activity Limitation Survey: Subprovincial Data for Alberta
(2) Alberta Part 1 Profiles, Statistics Canada 1986

Notes: '-' indicates the figure is not reliable.
The population data (denominator) used to estimate the proportions were calculated by combining census division and subdivision population distributions collected from data source (2).

6 SELECTED CHARACTERISTICS OF THE MORE SEVERELY DISABLED POPULATION IN ALBERTA AND SUBPROVINCIAL AREAS

Additional information regarding the more severely disabled population of Alberta was prepared during the HALS survey. From the information which was available, four areas were examined in greater detail: the types of disabilities experienced, the severity of disabilities, use of special aids by the more severely disabled, and measures of prescription and non-prescription drug use.

6.1 Types of Disability Among the More Severely Disabled in Alberta

Tables 6.1.1 and 6.1.2 present estimates of the percentage of disabled adults in Alberta and subprovincial areas by type of disability. Mobility disabilities were the most frequent category reported among the more severely disabled population aged 15 to 64 years. Lack of agility was the second most frequent category observed. Among the 15 to 64 years age group, the highest rates for mobility and agility disabilities occurred within the North subprovincial area.

The percentages of the types of disability shown among persons aged 65 years and older also indicated that mobility and agility disabilities were the most frequently reported categories.

Table 6.1.1

PREVALENCE OF DISABILITY BY TYPE FOR ALBERTA AND SUBPROVINCIAL AREAS (persons 15 to 64 years of age)

		Types						
	% Reports*	(1)	(2)	(3)	(4)	(5)	(6)	Total Population
Alberta	6.2%	4.2%	3.7%	0.9%	1.8%	1.8%	0.6%	1,581,170
North Central	6.3%	3.9%	3.5%	0.8%	2.1%	1.8%	0.5%	204,235
Central West	5.8%	3.7%	3.4%	0.6%	1.2%	0.9%	0.7%	48,475
South Central	6.2%	4.3%	3.7%	0.6%	1.8%	1.4%	0.6%	116,480
South East	6.3%	4.3%	3.7%	0.9%	2.2%	1.7%	0.6%	103,815
North	8.2%	5.6%	4.9%	1.3%	2.8%	2.4%	0.6%	142,075
Calgary	5.2%	3.5%	3.2%	0.7%	1.2%	1.6%	0.5%	455,985
Edmonton	6.6%	4.6%	3.7%	1.0%	1.7%	2.2%	0.6%	407,065
Lethbridge	5.9%	4.4%	3.7%	0.7%	1.9%	2.0%	0.0%	38,420
Medicine Hat	6.1%	4.6%	3.9%	1.1%	1.1%	1.3%	0.5%	27,015
Red Deer	6.7%	4.7%	3.9%	1.1%	2.5%	2.6%	0.0%	37,605

Data Source: Statistics Canada (1988) The Health and Activity Limitation Survey: Subprovincial Data for Alberta

Notes: The columns are numbered as follows: (1)=mobility, (2)=agility, (3)=seeing, (4)=hearing/speaking (5)=other, (6)=nature not specified.

* — The percentages in this column may be greater than the total number of disabled because persons who reported more than one type of disability are counted in each type.

Table 6.1.2

PREVALENCE OF DISABILITY BY TYPE FOR ALBERTA AND SUBPROVINCIAL AREAS (persons 65 years and older)

	% Reports*	Types (1)	(2)	(3)	(4)	(5)	(6)	Total Population
Alberta	26.0%	21.1%	18.2%	5.8%	12.7%	7.1%	1.0%	191,325
North Central	24.8%	20.8%	16.5%	5.0%	10.8%	6.9%	0.0%	24,085
Central West	27.9%	22.3%	19.2%	9.5%	10.7%	8.6%	0.0%	4,125
South Central	26.5%	21.8%	19.1%	5.9%	11.8%	5.7%	0.0%	17,685
South East	26.9%	22.0%	18.3%	6.2%	11.6%	9.1%	0.0%	18,420
North	28.8%	23.3%	19.6%	7.2%	14.5%	7.7%	0.0%	18,470
Calgary	26.0%	21.3%	20.3%	5.7%	11.2%	5.7%	0.0%	43,990
Edmonton	26.4%	20.7%	17.0%	5.5%	10.7%	8.7%	0.0%	47,365
Lethbridge	19.9%	16.4%	14.7%	4.6%	8.9%	4.5%	0.0%	7,610
Medicine Hat	21.4%	18.1%	14.2%	3.5%	8.9%	3.1%	0.0%	5,565
Red Deer	24.7%	21.2%	18.3%	8.4%	11.0%	9.5%	0.0%	4,010

Data Source: Statistics Canada (1988) The Health and Activity Limitation Survey: Subprovincial Data for Alberta

Notes: The columns are numbered as follows: (1)=mobility, (2)=agility, (3)=seeing, (4)=hearing/speaking (5)=other, (6)=nature not specified.

* — The percentages in this column may be greater than the total number of disabled because persons who reported more than one type of disability are counted in each type.

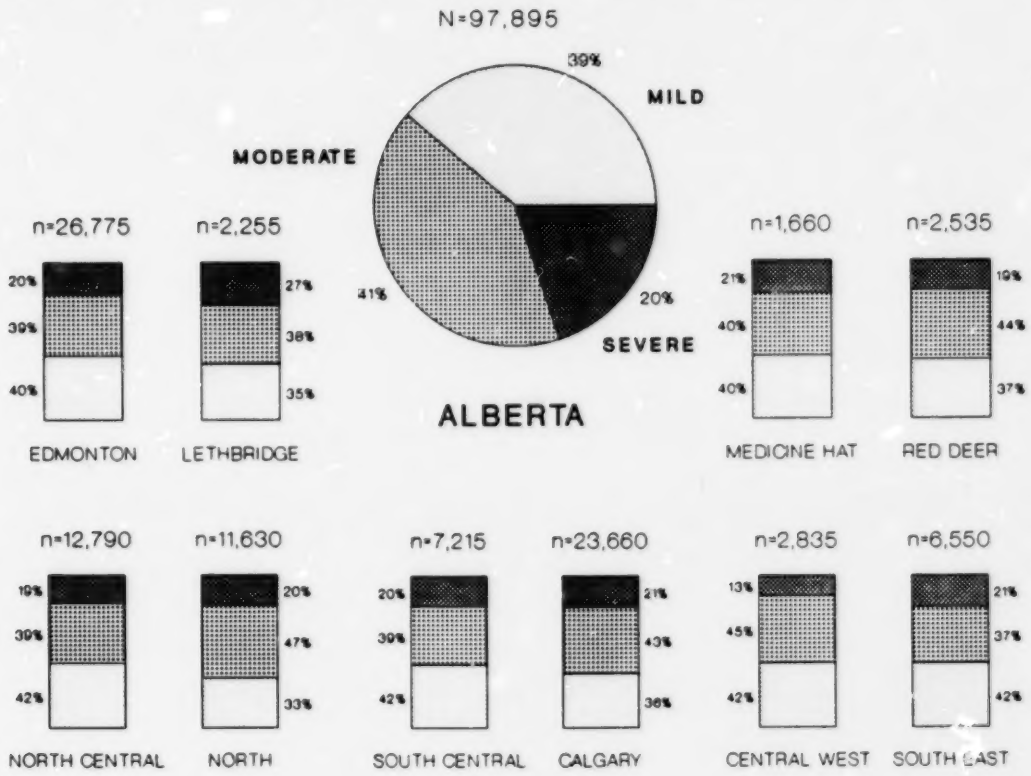
6.2 Severity of Disability Among the More Severely Disabled

A severity scale was developed during the HALS survey based upon answers to screening questions and additional questions regarding the use of aids for seeing and hearing. The results of this scoring, categorized using the terms "Mild," "Moderate" and "Severe," are shown in Charts 6.2.1 and 6.2.2. As the charts indicate, there is some variation between subprovincial areas in the severity of the disabilities reported. In Chart 6.2.1, over two thirds of disabilities among persons aged 15 to 64 years are "Mild" or "Moderate" in nature. The highest percentages reported for the "Mild" category occur in the subprovincial areas of North Central, South Central, Central West and South East with rates of 42%. Higher rates for the "Moderate" category occur in the North (47%), Central West (45%), and Red Deer (44%) subprovincial areas. "Severe" disabilities are generally present in 20% of the cases observed, however, the subprovincial area of Lethbridge has 27% of its disabilities falling under the "Severe" category.

As shown in Chart 6.2.2, the proportion of "Severe" disabilities has increased above the levels shown in Chart 6.2.1. For persons 65 years and older, the proportion of those reporting has increased to over 30%. In addition, the rate presented for the "Moderate" category has also increased in all regions except the North subprovincial area. The highest rates reported for the "Severe" category occur in the Calgary (45%) and Red Deer (43%) areas. Moderate disabilities were experienced by 47% of those in the Central West subprovincial area.

Chart 6.2.1

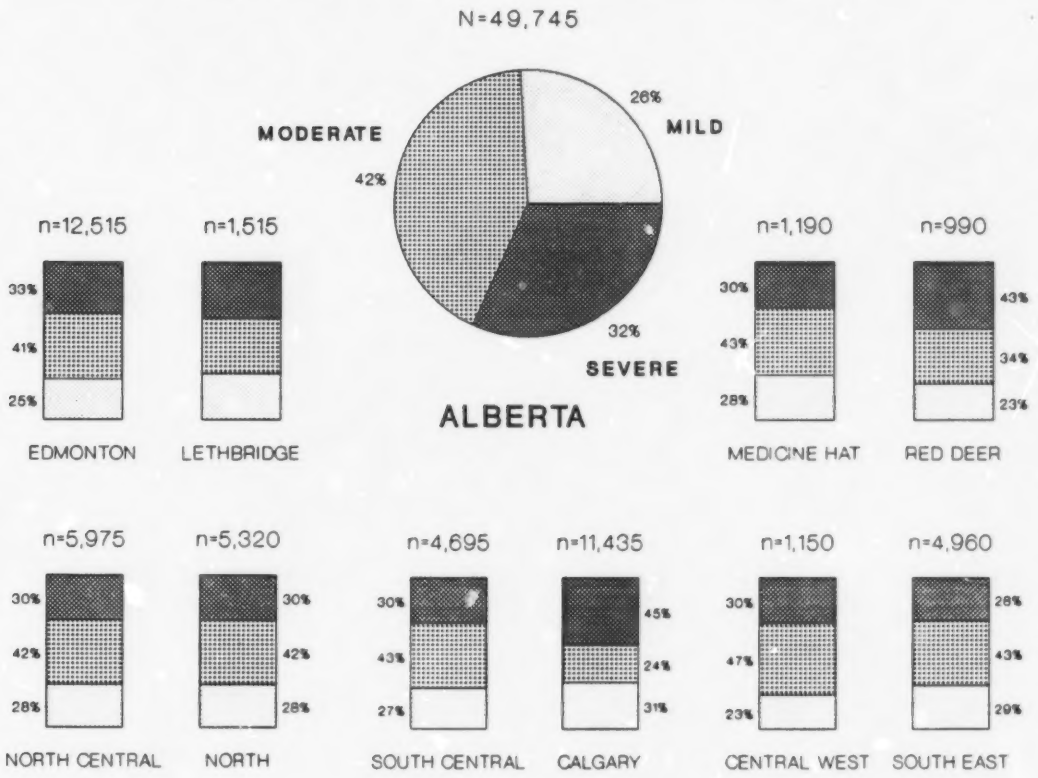
SEVERITY OF DISABILITY BY REGION
FOR PROVINCE AND SUBPROVINCIAL AREAS
(DISABLED PERSONS 15 TO 64 YEARS)



Data Source: Statistics Canada (1988) The Health and Activity Limitation Survey: Subprovincial Data for Alberta.

Chart 6.2.2

SEVERITY OF DISABILITY BY REGION
FOR PROVINCE AND SUBPROVINCIAL AREAS
(DISABLED PERSONS 65 YEARS AND OLDER)



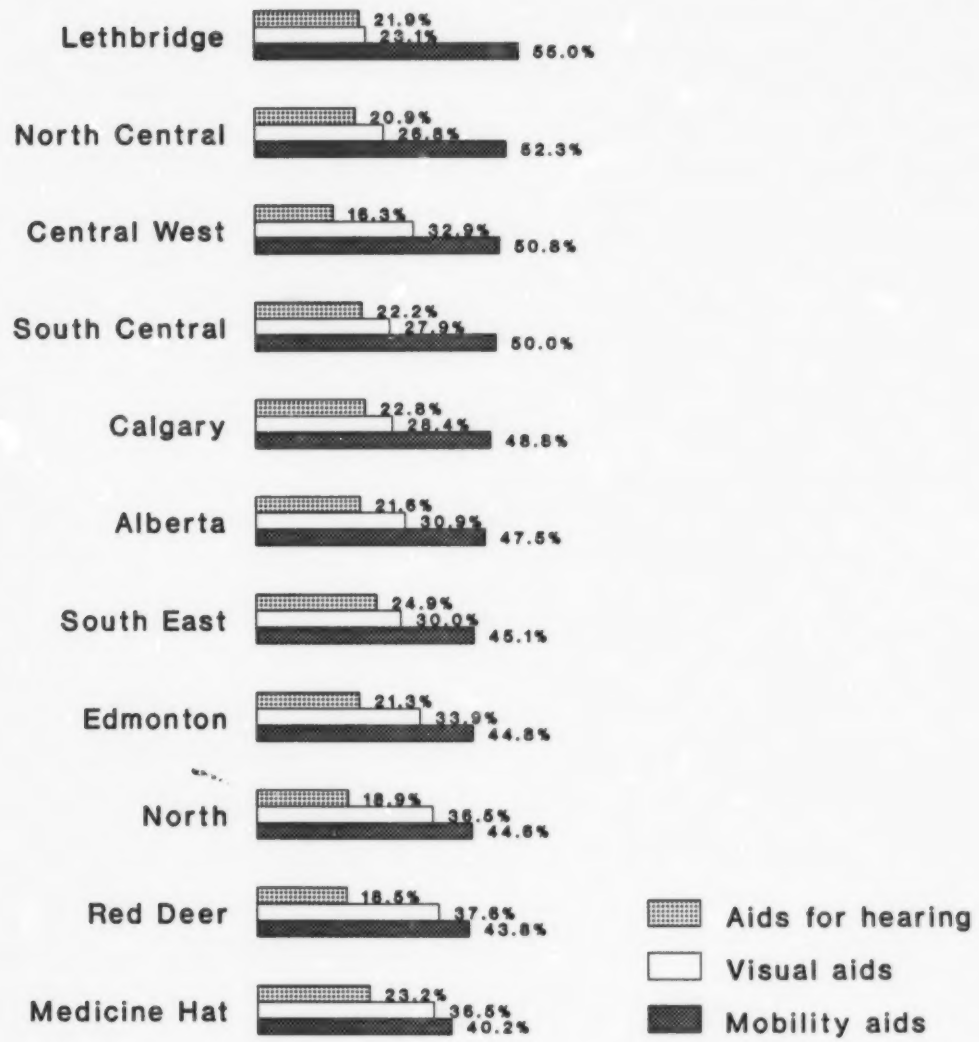
Data Source: Statistics Canada (1988) The Health and Activity Limitation Survey: Subprovincial Data for Alberta.

6.3 Special Aids Used or Needed by the More Severely Disabled

Chart 6.3 examines the special aids used by residents who are more severely disabled. As expected, mobility aids were the most frequently reported corrective aid used within the province and its subprovincial areas. In Alberta, 47.5% of the aids employed were for mobility. The highest rate reported in this category occurred for the Lethbridge area (55.0%) and the lowest rate was for the Medicine Hat subprovincial area (40.2%). Visual aids were the second most frequently reported category with a rate of 30.9% in Alberta. In contrast, aids for hearing were used by under 25% of the more severely disabled population in Alberta and its subprovincial areas.

Chart 6.3

SPECIAL AIDS USED OR NEEDED
(ALBERTA AND SUBPROVINCIAL AREAS)



Data Source: Statistics Canada (1988) The Health and Activity Limitation Survey: Subprovincal Data for Alberta.

6.4 Drug Use by the More Severely Disabled

Table 6.4 examines of prescription and non-prescription drug use by the more severely disabled. As shown in the table, daily use of prescription drugs occurred in approximately 60% of the more severely disabled population. The highest rate of daily prescription drug use was observed in the Lethbridge subprovincial area (66.6%) and the lowest rate in the Calgary area (58.0%). Regular use of prescription and non- prescription drugs was observed among 67.3% of the more severely disabled population in Alberta, with again the highest rate of in the subprovincial area of Lethbridge. The lowest rate was observed in the Central West area (62.9%).

Table 6.4

DRUG USE AMONG MORE SEVERELY DISABLED FOR ALBERTA AND SUBPROVINCIAL AREAS
(persons 15 years of age and over)

	North Central	Central West	South Central	South East	North	Calgary	Edmonton	Lethbridge	Medicine Hat	Red Deer	Alberta
No. persons using presciption drugs daily	11,615	2,335	7,575	7,355	9,955	20,360	24,065	2,510	1,850	2,140	89,760
Percent use	61.9%	58.6%	63.6%	63.9%	58.7%	58.0%	61.2%	66.6%	64.9%	60.8%	60.8%
Regular use of prescription and non-prescription drugs	12,610	2,505	8,175	8,060	10,710	22,830	27,305	2,770	2,000	2,340	99,310
Percent use	67.3%	62.9%	68.6%	70.0%	63.2%	65.1%	69.5%	73.5%	70.2%	66.3%	67.3%

Data Source: **Statistics Canada (1988) The Health and Activity Limitation Survey: Subprovincial Data for Alberta**

7 CONCLUSION

The primary aim of the preceding analysis was to estimate and report the prevalence and distribution of disability among Albertans, based on preliminary data from the 1986-87 Health and Activity Limitation Survey. Knowledge concerning the nature and severity of disability experienced by Albertans and the barriers that disabled persons face in the conduct of their everyday lives would be useful for developing new programs and services, to evaluate existing programs, and to increase the awareness of barriers which may have been imposed on disabled Albertans.

Further Analysis of HALS

This report presents only a general overview of estimated prevalence of disability in Alberta obtained from a secondary analysis of HALS data. The findings were examined within a broad demographic framework by looking at gender- and age-specific disability rates. Given the complexity of topics included in the HALS survey, additional analysis may be warranted in order to prepare technical reports on some of the relevant areas covered in the survey.

The World Health Organization (1980) classification of impairments, disabilities, and handicaps describes the consequences of crippling diseases. Such consequences are particularly important for the elderly population insofar as the demand for long-term care services is determined by disabilities related to specific chronic illnesses. In other words, an important area of research includes the identification of disabilities and functional impairments related to chronic conditions.

Another important issue concerns the pattern of association of socio-economic status, life-style and diet/substance consumption with disability. For example, disabilities that are considered to be genetic in origin, may be viewed and treated quite differently from those related to social forces (e.g., occupational hazards, accidents or drug/alcohol consumption). Information on these subjects would not only assist in the establishment of preventive measures, but would also permit the evaluation of existing health promotion programs.

REFERENCES

Statistics Canada (1988) The Health and Activity Limitation Survey: Selected Data for Canada, Provinces and Territories. Catalogue 41034, Ottawa.

Statistics Canada (1988) The Health and Activity Limitation Survey: Research Program for the Disability Database Program, Ottawa.

Statistics Canada (1988) The Daily, Catalogue 11-001E, Ottawa.

World Health Organization (1980). International Classification of Impairments, Disabilities, and Handicaps: A Manual of Classification Relating to the Consequences of Disease, Geneva.

APPENDIX A

1. The Health and Activity Limitation Survey uses the World Health Organization's definition of disability, which is

> "... any restriction or lack (resulting from an impairment) of ability to perform an activity in the manner or within the range considered normal for a human being."

Adults aged 15 and older were asked a number of questions about activities which most persons carry out daily. Persons who indicated some difficulty in performing any of the 17 activities, such as "Do you have any trouble walking up and down a flight of stairs?" or "Are you limited in the kind or amount of activity you can do because of a long-term emotional, psychological or mental health condition" were considered disabled.

For children under the age of 15, the survey inquired into the existence of general limitations, chronic conditions and the use of technical aids. A positive response in any one of these three categories was taken as an indication of the presence of a disability.

2. Nature of disability defined

Mobility:	limited in ability to walk, move from room to room, carry an object for 10 meters, or stand for long periods
Agility:	limited in ability to bend, dress or undress oneself, get in and out of bed, cut toenails, use fingers to grasp or handle objects, reach, or cut own food
Seeing:	limited in ability to read ordinary newsprint or to see someone from 4 meters, even when wearing glasses
Hearing:	limited in ability to hear what is being said in conversation with one other person or two or more persons, even when wearing a hearing aid
Speaking:	limited in ability to speak and be understood
Other:	limited because of a learning disability or emotional psychiatric disability, or because of developmental delay
Unknown:	limited but nature not specified

APPENDIX B

Most of the estimates provided in this report are qualitative estimates of the number, proportion or percentage of the surveyed population possessing certain characteristics or falling into some defined category. In this context, an estimate of the number of persons possessing a certain characteristic is referred to as an estimate of an aggregate.

Since estimates from a survey are subject to sampling error, an the method to measure sampling error which Statistics Canada uses is briefly described here. The basis for measuring the potential size of sampling errors is the standard error of estimates derived from survey results.

However, because of the large variety of estimates that can be produced from a survey such as this, the standard error of an estimate is usually expressed relative to the estimate to which it pertains. This resulting measure known as the coefficient of variation of an estimate, is obtained by dividing the standard error of the estimate by the estimate itself and is expressed as a percentage of the estimate.

In order to supply coefficients of variation which would be applicable to a wide variety of qualitative estimates, a set

Sample calculations are included here in order to demonstrate the method of finding the coefficient of variation of an estimate and of a difference of two estimates.

Referring to the Health and Activity Limitation Survey, Microdata User's Guided, page 12, the rules given should enable a user to determine the approximate coefficients of variation from the Sampling Variability Tables for estimates of the number or proportion of the surveyed population possessing a certain characteristic and for differences between estimates.

Rule 1: Coefficient of Variation of an Estimate

"On the Sampling Variability Table for the appropriate geographic area and the appropriate population and age group, locate the value nearest to the estimate produces. If the estimate is a number, look under the heading TOTAL; if the nearest estimate is a proportion, look under the heading PROP (percentage proportion). The corresponding number in the C.V. column represents the approximate coefficient of variation."

Example: Referring to data found on Chart 2 of the report, find the C.V. for the disability rate of 47.4% (as a percentage of total population) for seniors 65+ in Alberta.

Look up table Alberta/Total Population, under Seniors column:

for 46.33%, C.V. = 4.52%
for 49.23%, C.V. = 4.27%

by linear extrapolation:

for 47.4% (or 0.474):

$$\frac{49.23 - 47.4}{49.23 - 46.33} = \frac{4.27 - x}{4.27 - 4.52}$$

$x = 4.43$
therefore, C.V. = 4.43%

Rule 2: Coefficient of Variation of a Difference of Estimates "The standard error of a difference between two estimates is approximately equal to the square root of the sum of squares of each standard error considered separately. That is, the standard error of a difference,

$$\hat{d} = \hat{X}_1 - \hat{X}_2$$

$$\text{is } \sigma\hat{d} = \sqrt{(\hat{X}_1 \alpha_1)^2 + (\hat{X}_2 \alpha_2)^2}$$

Where $\hat{X}_1$ is estimate 1, $\hat{X}_2$ is estimate 2, and a_1 and a_2 are the coefficients of variation of $\hat{X}_1$ and $\hat{X}_2$ respectively. The coefficient of variation of d is given by σ_d/d. This formula is accurate for the difference between separate and uncorrelated characteristics but is only approximate otherwise.

Example: Using data found in chart 2 of the report, find the C.V. for the difference between the Alberta male 65+ disability rate of 48.5% and the Canadian 65+ male disability rate of 43.7%.

Look up table Canada/Total Population, under Seniors column:

for 40.25%, C.V. = 1.69%
for 80.49%, C.V. = 0.68%

by linear extrapolation:

for 43.7% (or 0.437):

$$\frac{80.49 - 43.7}{80.49 - 40.25} = \frac{0.68 - x}{0.68 - 1.69}$$

$x = 1.603$

or C.V. = 1.603%

Similarly, for the Alberta rate of 48.5%:

for 46.33%, C.V. = 4.52%
for 49.23%, C.V. = 4.27%

by linear extrapolation:

C.V. for 48.5% = 4.33%

$$\frac{\text{SQRT}((0.485*0.0433)** 2 + (0.437*0.01603)** 2)}{(0.485 - 0.437)}$$

= 0.02214/0.048 = 0.461 or 46.1%

Since the C.V. of the difference of estimates is above 25%, the difference is not considered to be statistically significant and may have occurred by chance.

CANADA

TOTAL POPULATION/POPULATION TOTALE

ADULTS(15 YEARS+) / ADULTES(15 ANS+)		
TOTAL	PROP (%)	CV (%)
1000	0.01	76.02
1250	0.01	67.99
1500	0.01	62.07
1750	0.01	57.47
2000	0.01	53.75
3000	0.02	43.89
4000	0.02	38.01
5000	0.03	33.99
6000	0.03	31.03
7000	0.04	28.73
8000	0.04	26.87
9000	0.05	25.34
10000	0.05	24.03
15000	0.08	19.62
20000	0.10	16.99
30000	0.15	13.87
40000	0.21	12.01
50000	0.26	10.74
60000	0.31	9.80
70000	0.36	9.07
80000	0.41	8.48
90000	0.46	8.00
100000	0.51	7.58
125000	0.64	6.78
150000	0.77	6.18
200000	1.03	5.35
250000	1.28	4.78
300000	1.54	4.36
350000	1.80	4.03
400000	2.05	3.76
450000	2.31	3.54
500000	2.57	3.36
750000	3.85	2.72
1000000	5.13	2.34
2000000	10.26	1.61
3000000	15.40	1.28
4000000	20.53	1.07
5000000	25.66	0.93
6000000	30.79	0.82
7000000	35.93	0.73
8000000	41.06	0.65
9000000	46.19	0.59
10000000	51.32	0.53

ADULTS(15-64 YEARS) / ADULTES(15-64 ANS)		
TOTAL	PROP (%)	CV (%)
1000	0.01	76.97
1250	0.01	68.84
1500	0.01	62.84
1750	0.01	58.18
2000	0.01	54.42
3000	0.02	44.43
4000	0.02	38.48
5000	0.03	34.42
6000	0.04	31.42
7000	0.04	29.09
8000	0.05	27.21
9000	0.05	25.65
10000	0.06	24.33
15000	0.09	19.86
20000	0.12	17.20
30000	0.18	14.04
40000	0.24	12.18
50000	0.29	10.87
60000	0.35	9.92
70000	0.41	9.18
80000	0.47	8.59
90000	0.53	8.09
100000	0.59	7.67
125000	0.74	6.86
150000	0.88	6.26
200000	1.18	5.41
250000	1.47	4.83
300000	1.76	4.40
350000	2.06	4.07
400000	2.35	3.80
450000	2.65	3.58
500000	2.94	3.39
750000	4.41	2.75
1000000	5.88	2.36
2000000	11.77	1.62
3000000	17.65	1.28
4000000	23.53	1.06
5000000	29.41	0.91
6000000	35.30	0.80
7000000	41.18	0.71
8000000	47.06	0.63
9000000	52.94	0.56
10000000	58.83	0.49

SENIORS (65 YEARS+) / PERSONNES AGÉES(65 ANS+)		
TOTAL	PROP (%)	CV (%)
1000	0.04	69.19
1250	0.05	61.88
1500	0.06	56.49
1750	0.07	52.29
2000	0.08	48.91
3000	0.12	39.93
4000	0.16	34.57
5000	0.20	30.92
6000	0.24	28.22
7000	0.28	26.12
8000	0.32	24.43
9000	0.36	23.03
10000	0.40	21.84
15000	0.60	17.81
20000	0.80	15.41
30000	1.21	12.58
40000	1.61	10.85
50000	2.01	9.69
60000	2.41	8.83
70000	2.82	8.15
80000	3.22	7.61
90000	3.62	7.16
100000	4.02	6.78
125000	5.03	6.03
150000	6.04	5.48
200000	8.05	4.69
250000	10.06	4.15
300000	12.07	3.75
350000	14.08	3.43
400000	16.10	3.17
450000	18.11	2.95
500000	20.12	2.77
750000	30.18	2.11
1000000	40.25	1.69
2000000	80.49	0.88
3000000	.	.
4000000	.	.
5000000	.	.
6000000	.	.
7000000	.	.
8000000	.	.
9000000	.	.
10000000	.	.

NOTE: WHEN TOTAL IS GREATER THAN THE POPULATION SIZE, THE PERCENTAGE OF PROPORTION AND OF CV ARE REPRESENTED BY DOTS.

NOTE: LORSQUE LE TOTAL EST SUPÉRIEUR À LA TAILLE DE LA POPULATION, LE POURCENTAGE DE LA POPULATION ET DU CV SONT REPRÉSENTÉS PAR DES POINTS.

CANADA

DISABLED POPULATION/POPULATION AYANT UNE INCAPACITÉ

ADULTS(15 YEARS+) / ADULTES(15 ANS+)			ADULTS(15-64 YEARS) / ADULTES(15-64 ANS)			SENIORS (65 YEARS+) / PERSONNES AGÉES(65 ANS+)		
TOTAL	PROP (%)	CV (%)	TOTAL	PROP (%)	CV (%)	TOTAL	PROP (%)	CV (%)
500	0.02	29.60	500	0.03	26.44	500	0.06	34.29
750	0.03	24.17	750	0.05	21.59	750	0.09	27.99
1000	0.04	20.93	1000	0.07	18.70	1000	0.12	24.24
1250	0.05	18.72	1250	0.09	16.72	1250	0.15	21.68
1500	0.07	17.09	1500	0.10	15.26	1500	0.18	19.79
1750	0.08	15.82	1750	0.12	14.13	1750	0.21	18.32
2000	0.09	14.80	2000	0.14	13.22	2000	0.24	17.14
3000	0.13	12.08	3000	0.21	10.79	3000	0.36	13.99
4000	0.18	10.46	4000	0.28	9.34	4000	0.47	12.11
5000	0.22	9.36	5000	0.35	8.35	5000	0.59	10.83
6000	0.26	8.54	6000	0.42	7.62	6000	0.71	9.88
7000	0.31	7.91	7000	0.49	7.06	7000	0.83	9.15
8000	0.35	7.39	8000	0.56	6.60	8000	0.95	8.56
9000	0.40	6.97	9000	0.63	6.22	9000	1.07	8.06
10000	0.44	6.61	10000	0.70	5.90	10000	1.18	7.65
15000	0.66	5.40	15000	1.05	4.81	15000	1.78	6.24
20000	0.88	4.67	20000	1.40	4.16	20000	2.37	5.39
30000	1.32	3.81	30000	2.10	3.39	30000	3.55	4.39
40000	1.76	3.29	40000	2.80	2.93	40000	4.73	3.79
50000	2.20	2.94	50000	3.50	2.62	50000	5.92	3.39
60000	2.64	2.68	60000	4.20	2.38	60000	7.10	3.08
70000	3.08	2.48	70000	4.90	2.20	70000	8.29	2.85
80000	3.52	2.32	80000	5.60	2.05	80000	9.47	2.66
90000	3.96	2.18	90000	6.30	1.93	90000	10.65	2.50
100000	4.40	2.07	100000	7.00	1.83	100000	11.84	2.36
125000	5.50	1.84	125000	8.75	1.63	125000	14.80	2.10
150000	6.60	1.68	150000	10.50	1.48	150000	17.76	1.90
200000	8.80	1.45	200000	14.00	1.26	200000	23.67	1.62
250000	11.00	1.28	250000	17.50	1.12	250000	29.59	1.43
300000	13.20	1.17	300000	21.00	1.01	300000	35.51	1.29
350000	15.39	1.07	350000	24.50	0.92	350000	41.43	1.17
400000	17.59	1.00	400000	28.00	0.85	400000	47.35	1.08
450000	19.79	0.93	450000	31.50	0.79	450000	53.27	1.00
500000	21.99	0.88	500000	34.99	0.74	500000	59.19	0.94
550000	24.19	0.83	550000	38.49	0.69	550000	65.10	0.88
600000	26.39	0.79	600000	41.99	0.65	600000	71.02	0.82
650000	28.59	0.76	650000	45.49	0.62	650000	76.94	0.78
700000	30.79	0.72	700000	48.99	0.59	700000	82.86	0.74
750000	32.99	0.69	750000	52.49	0.56	750000	88.78	0.70
800000	35.19	0.67	800000	55.99	0.53	800000	94.70	0.66
850000	37.39	0.64	850000	59.49	0.51	850000	.	.
900000	39.59	0.62	900000	62.99	0.48	900000	.	.
950000	41.78	0.60	950000	66.49	0.46	950000	.	.
1000000	43.98	0.58	1000000	69.99	0.44	1000000	.	.

NOTE: WHEN TOTAL IS GREATER THAN THE POPULATION SIZE, THE PERCENTAGE OF PROPORTION AND OF CV ARE REPRESENTED BY DOTS.

NOTE: LORSQUE LE TOTAL EST SUPÉRIEUR À LA TAILLE DE LA POPULATION, LE POURCENTAGE DE LA POPULATION ET DU CV SONT REPRÉSENTÉS PAR DES POINTS.

CANADA

NON DISABLED POPULATION/POPULATION N'AYANT PAS D'INCAPACITÉ

ADULTS(15 YEARS+)
ADULTES(15 ANS+)

TOTAL	PROP (%)	CV (%)
1000	0.01	79.30
1250	0.01	70.93
1500	0.01	64.75
1750	0.01	59.94
2000	0.01	56.07
3000	0.02	45.78
4000	0.02	39.65
5000	0.03	35.46
6000	0.04	32.37
7000	0.04	29.97
8000	0.05	28.03
9000	0.05	26.43
10000	0.06	25.07
15000	0.09	20.47
20000	0.12	17.72
30000	0.18	14.47
40000	0.24	12.52
50000	0.30	11.20
60000	0.36	10.22
70000	0.42	9.46
80000	0.48	8.84
90000	0.54	8.34
100000	0.60	7.91
125000	0.75	7.07
150000	0.90	6.45
200000	1.20	5.57
250000	1.50	4.98
300000	1.80	4.54
350000	2.10	4.19
400000	2.40	3.92
450000	2.70	3.69
500000	3.00	3.49
750000	4.49	2.83
1000000	5.99	2.43
2000000	11.98	1.66
3000000	17.98	1.31
4000000	23.97	1.09
5000000	29.96	0.94
6000000	35.95	0.82
7000000	41.94	0.72
8000000	47.93	0.64
9000000	53.93	0.57
10000000	59.92	0.50

ADULTS(15-64 YEARS)
ADULTES(15-64 ANS)

TOTAL	PROP (%)	CV (%)
1000	0.01	79.32
1250	0.01	70.95
1500	0.01	64.76
1750	0.01	59.96
2000	0.01	56.09
3000	0.02	45.79
4000	0.03	39.66
5000	0.03	35.47
6000	0.04	32.38
7000	0.05	29.97
8000	0.05	28.04
9000	0.06	26.43
10000	0.07	25.08
15000	0.10	20.47
20000	0.13	17.73
30000	0.20	14.47
40000	0.26	12.53
50000	0.33	11.20
60000	0.39	10.22
70000	0.46	9.46
80000	0.53	8.85
90000	0.59	8.34
100000	0.66	7.91
125000	0.82	7.07
150000	0.98	6.44
200000	1.31	5.57
250000	1.64	4.98
300000	1.97	4.53
350000	2.30	4.19
400000	2.63	3.91
450000	2.95	3.68
500000	3.28	3.49
750000	4.92	2.82
1000000	6.57	2.42
2000000	13.13	1.65
3000000	19.70	1.30
4000000	26.26	1.08
5000000	32.83	0.92
6000000	39.39	0.80
7000000	45.96	0.70
8000000	52.52	0.61
9000000	59.09	0.53
10000000	65.65	0.46

SENIORS (65 YEARS+)
PERSONNES AGÉES(65 ANS+)

TOTAL	PROP (%)	CV (%)
1000	0.07	79.04
1250	0.09	70.69
1500	0.10	64.53
1750	0.12	59.74
2000	0.14	55.87
3000	0.21	45.60
4000	0.27	39.48
5000	0.34	35.30
6000	0.41	32.21
7000	0.48	29.81
8000	0.55	27.88
9000	0.62	26.28
10000	0.69	24.92
15000	1.03	20.31
20000	1.37	17.56
30000	2.06	14.29
40000	2.74	12.33
50000	3.43	10.99
60000	4.12	10.00
70000	4.80	9.22
80000	5.49	8.59
90000	6.17	8.07
100000	6.86	7.63
125000	8.57	6.76
150000	10.29	6.12
200000	13.72	5.19
250000	17.15	4.55
300000	20.58	4.07
350000	24.01	3.68
400000	27.44	3.37
450000	30.87	3.10
500000	34.30	2.87
750000	51.45	2.01
1000000	68.59	1.40
2000000	.	.
3000000	.	.
4000000	.	.
5000000	.	.
6000000	.	.
7000000	.	.
8000000	.	.
9000000	.	.
10000000	.	.

NOTE: WHEN TOTAL IS GREATER THAN THE POPULATION SIZE, THE PERCENTAGE OF PROPORTION AND OF CV ARE REPRESENTED BY DOTS.

NOTE: LORSQUE LE TOTAL EST SUPÉRIEUR À LA TAILLE DE LA POPULATION, LE POURCENTAGE DE LA POPULATION ET DU CV SONT REPRÉSENTÉS PAR DES POINTS.

ALBERTA/ALBERTA

TOTAL POPULATION/POPULATION TOTALE

ADULTS(15 YEARS+) / ADULTES(15 ANS+)			ADULTS(15-64 YEARS) / ADULTES(15-64 ANS)			SENIORS (65 YEARS+) / PERSONNES AGÉES(65 ANS+)		
TOTAL	PROP (%)	CV (%)	TOTAL	PROP (%)	CV (%)	TOTAL	PROP (%)	CV (%)
1000	0.06	66.84	1000	0.06	67.98	1000	0.58	55.04
2000	0.11	47.25	2000	0.13	48.05	2000	1.16	38.80
3000	0.17	38.57	3000	0.19	39.22	3000	1.74	31.59
4000	0.23	33.39	4000	0.25	33.96	4000	2.32	27.28
5000	0.28	29.86	5000	0.31	30.36	5000	2.90	24.33
6000	0.34	27.25	6000	0.38	27.71	6000	3.47	22.14
7000	0.40	25.22	7000	0.44	25.64	7000	4.05	20.44
8000	0.45	23.58	8000	0.50	23.98	8000	4.63	19.06
9000	0.51	22.23	9000	0.56	22.60	9000	5.21	17.91
10000	0.57	21.08	10000	0.63	21.44	10000	5.79	16.94
11000	0.62	20.09	11000	0.69	20.43	11000	6.37	16.10
12000	0.68	19.23	12000	0.75	19.56	12000	6.95	15.37
13000	0.73	18.47	13000	0.81	18.78	13000	7.53	14.72
14000	0.79	17.80	14000	0.88	18.09	14000	8.11	14.14
15000	0.85	17.19	15000	0.94	17.47	15000	8.69	13.62
16000	0.90	16.64	16000	1.00	16.91	16000	9.27	13.14
17000	0.96	16.14	17000	1.07	16.40	17000	9.85	12.71
18000	1.02	15.68	18000	1.13	15.94	18000	10.42	12.31
19000	1.07	15.26	19000	1.19	15.51	19000	11.00	11.95
20000	1.13	14.86	20000	1.25	15.11	20000	11.58	11.61
21000	1.19	14.50	21000	1.32	14.74	21000	12.16	11.29
22000	1.24	14.16	22000	1.38	14.40	22000	12.74	10.99
23000	1.30	13.85	23000	1.44	14.08	23000	13.32	10.72
24000	1.36	13.55	24000	1.50	13.78	24000	13.90	10.45
25000	1.41	13.28	25000	1.57	13.49	25000	14.48	10.21
30000	1.70	12.10	30000	1.88	12.30	30000	17.37	9.16
35000	1.98	11.19	35000	2.19	11.37	35000	20.27	8.33
40000	2.26	10.45	40000	2.51	10.62	40000	23.17	7.85
45000	2.54	9.84	45000	2.82	9.99	45000	26.06	7.08
50000	2.83	9.32	50000	3.13	9.46	50000	28.96	6.58
55000	3.11	8.87	55000	3.45	9.01	55000	31.85	6.14
60000	3.39	8.48	60000	3.76	8.61	60000	34.75	5.76
65000	3.67	8.14	65000	4.07	8.26	65000	37.65	5.41
70000	3.96	7.83	70000	4.39	7.95	70000	40.54	5.09
75000	4.24	7.55	75000	4.70	7.66	75000	43.44	4.79
80000	4.52	7.30	80000	5.01	7.41	80000	46.33	4.52
85000	4.81	7.08	85000	5.33	7.18	85000	49.23	4.27
90000	5.09	6.87	90000	5.64	6.96	90000	52.12	4.03
95000	5.37	6.67	95000	5.95	6.77	95000	55.02	3.80
100000	5.65	6.49	100000	6.27	6.58	100000	57.92	3.58
125000	7.07	5.76	125000	7.83	5.84	125000	72.40	2.59
150000	8.48	5.22	150000	9.40	5.28	150000	86.87	1.63
200000	11.31	4.45	200000	12.53	4.50	200000	.	.
250000	14.13	3.92	250000	15.66	3.95	250000	.	.
300000	16.96	3.52	300000	18.80	3.54	300000	.	.
350000	19.79	3.20	350000	21.93	3.21	350000	.	.
400000	22.62	2.94	400000	25.06	2.94	400000	.	.
450000	25.44	2.72	450000	28.19	2.72	450000	.	.
500000	28.27	2.53	500000	31.33	2.52	500000	.	.

NOTE: WHEN TOTAL IS GREATER THAN THE POPULATION SIZE, THE PERCENTAGE OF PROPORTION AND OF CV ARE REPRESENTED BY DOTS.

NOTE : LORSQUE LE TOTAL EST SUPÉRIEUR À LA TAILLE DE LA POPULATION, LE POURCENTAGE DE LA POPULATION ET DU

ALBERTA/ALBERTA

DISABLED POPULATION/POPULATION AYANT UNE INCAPACITÉ

ADULTS(15 YEARS+)
ADULTES(15 ANS+)

TOTAL	PROP (%)	CV (%)
500	0.27	24.24
750	0.40	19.79
1000	0.53	17.13
1250	0.66	15.32
1500	0.80	13.98
1750	0.93	12.93
2000	1.06	12.09
2250	1.20	11.40
2500	1.33	10.81
2750	1.46	10.30
3000	1.59	9.86
3250	1.73	9.47
3500	1.86	9.12
3750	1.99	8.81
4000	2.12	8.53
4250	2.26	8.27
4500	2.39	8.03
4750	2.52	7.82
5000	2.66	7.61
6000	3.19	6.94
7000	3.72	6.42
8000	4.25	5.99
9000	4.78	5.64
10000	5.31	5.34
11000	5.84	5.09
12000	6.37	4.86
13000	6.91	4.66
14000	7.44	4.49
15000	7.97	4.33
16000	8.50	4.19
17000	9.03	4.05
18000	9.56	3.93
19000	10.09	3.82
20000	10.62	3.72
21000	11.15	3.62
22000	11.69	3.54
23000	12.22	3.45
24000	12.75	3.37
25000	13.28	3.30
30000	15.94	2.99
35000	18.59	2.74
40000	21.25	2.55
45000	23.90	2.38
50000	26.56	2.24
75000	39.84	1.74
100000	53.12	1.44
125000	66.40	1.21
150000	79.68	1.04

ADULTS(15-64 YEARS)
ADULTES(15-64 ANS)

TOTAL	PROP (%)	CV (%)
500	0.39	22.76
750	0.59	18.57
1000	0.79	16.08
1250	0.99	14.37
1500	1.18	13.11
1750	1.38	12.13
2000	1.58	11.34
2250	1.77	10.68
2500	1.97	10.13
2750	2.17	9.65
3000	2.37	9.24
3250	2.56	8.87
3500	2.76	8.54
3750	2.96	8.25
4000	3.15	7.98
4250	3.35	7.74
4500	3.55	7.51
4750	3.75	7.31
5000	3.94	7.12
6000	4.73	6.48
7000	5.52	5.99
8000	6.31	5.59
9000	7.10	5.25
10000	7.89	4.97
11000	8.67	4.73
12000	9.46	4.51
13000	10.25	4.33
14000	11.04	4.16
15000	11.83	4.01
16000	12.62	3.87
17000	13.41	3.74
18000	14.19	3.63
19000	14.98	3.52
20000	15.77	3.42
21000	16.56	3.33
22000	17.35	3.25
23000	18.14	3.17
24000	18.93	3.09
25000	19.71	3.02
30000	23.66	2.72
35000	27.60	2.48
40000	31.54	2.29
45000	35.49	2.12
50000	39.43	1.98
75000	59.14	1.48
100000	78.86	1.15
125000	.	.
150000	.	.

SENIORS (65 YEARS+)
PERSONNES AGÉES(65 ANS+)

TOTAL	PROP (%)	CV (%)
500	0.81	27.00
750	1.22	22.02
1000	1.63	19.05
1250	2.03	17.02
1500	2.44	15.53
1750	2.85	14.36
2000	3.25	13.42
2250	3.66	12.64
2500	4.07	11.98
2750	4.48	11.41
3000	4.88	10.91
3250	5.29	10.47
3500	5.70	10.08
3750	6.10	9.73
4000	6.51	9.41
4250	6.92	9.12
4500	7.32	8.86
4750	7.73	8.61
5000	8.14	8.38
6000	9.76	7.62
7000	11.39	7.03
8000	13.02	6.55
9000	14.65	6.15
10000	16.27	5.81
11000	17.90	5.51
12000	19.53	5.25
13000	21.15	5.03
14000	22.78	4.82
15000	24.41	4.64
16000	26.04	4.47
17000	27.66	4.32
18000	29.29	4.18
19000	30.92	4.05
20000	32.55	3.93
21000	34.17	3.81
22000	35.80	3.71
23000	37.43	3.61
24000	39.06	3.52
25000	40.68	3.43
30000	48.82	3.05
35000	56.96	2.75
40000	65.09	2.50
45000	73.23	2.29
50000	81.37	2.11
75000	.	.
100000	.	.
125000	.	.
150000	.	.

NOTE: WHEN TOTAL IS GREATER THAN THE POPULATION SIZE, THE PERCENTAGE OF PROPORTION AND OF CV ARE REPRESENTED BY DOTS.

NOTE: LORSQUE LE TOTAL EST SUPÉRIEUR À LA TAILLE DE LA POPULATION, LE POURCENTAGE DE LA POPULATION ET DU CV SONT REPRÉSENTÉS PAR DES POINTS.

ALBERTA/ALBERTA

NON DISABLED POPULATION/POPULATION N'AYANT PAS D'INCAPACITÉ

ADULTS(15 YEARS+) / ADULTES(15 ANS+)			ADULTS(15-64 YEARS) / ADULTES(15-64 ANS)			SENIORS (65 YEARS+) / PERSONNES AGÉES(65 ANS+)		
TOTAL	PROP (%)	CV (%)	TOTAL	PROP (%)	CV (%)	TOTAL	PROP (%)	CV (%)
1000	0.06	69.58	1000	0.07	69.95	1000	1.00	63.64
1250	0.08	62.23	1250	0.09	62.56	1250	1.26	56.85
1500	0.10	56.81	1500	0.10	57.11	1500	1.51	51.83
1750	0.11	52.59	1750	0.12	52.87	1750	1.76	47.92
2000	0.13	49.19	2000	0.14	49.45	2000	2.01	44.77
3000	0.19	40.15	3000	0.21	40.36	3000	3.01	36.37
4000	0.26	34.76	4000	0.28	34.94	4000	4.02	31.33
5000	0.32	31.08	5000	0.35	31.24	5000	5.02	27.88
6000	0.39	28.36	6000	0.42	28.51	6000	6.03	25.31
7000	0.45	26.25	7000	0.49	26.39	7000	7.03	23.31
8000	0.52	24.55	8000	0.56	24.67	8000	8.04	21.68
9000	0.58	23.13	9000	0.62	23.25	9000	9.04	20.33
10000	0.65	21.94	10000	0.69	22.05	10000	10.05	19.18
15000	0.97	17.88	15000	1.04	17.97	15000	15.07	15.22
20000	1.30	15.46	20000	1.39	15.54	20000	20.10	12.78
30000	1.95	12.58	30000	2.08	12.64	30000	30.15	9.76
40000	2.60	10.86	40000	2.78	10.91	40000	40.20	7.82
50000	3.25	9.68	50000	3.47	9.72	50000	50.25	6.38
60000	3.90	8.81	60000	4.17	8.84	60000	60.30	5.20
70000	4.55	8.13	70000	4.86	8.16	70000	70.35	4.16
80000	5.20	7.58	80000	5.55	7.60	80000	80.40	3.17
90000	5.84	7.12	90000	6.25	7.14	90000	90.45	2.08
100000	6.49	6.73	100000	6.94	6.75	100000	.	.
125000	8.12	5.97	125000	8.68	5.98	125000	.	.
150000	9.74	5.40	150000	10.41	5.41	150000	.	.
200000	12.99	4.59	200000	13.89	4.59	200000	.	.
250000	16.24	4.03	250000	17.36	4.02	250000	.	.
300000	19.48	3.61	300000	20.83	3.59	300000	.	.
350000	22.73	3.27	350000	24.30	3.25	350000	.	.
400000	25.98	2.99	400000	27.77	2.97	400000	.	.
450000	29.22	2.76	450000	31.24	2.74	450000	.	.
500000	32.47	2.56	500000	34.71	2.53	500000	.	.
750000	48.71	1.82	750000	52.07	1.77	750000	.	.
1000000	64.94	1.30	1000000	69.43	1.22	1000000	.	.

NOTE: WHEN TOTAL IS GREATER THAN THE POPULATION SIZE, THE PERCENTAGE OF PROPORTION AND OF CV ARE REPRESENTED BY DOTS.

NOTE: LORSQUE LE TOTAL EST SUPÉRIEUR À LA TAILLE DE LA POPULATION, LE POURCENTAGE DE LA POPULATION ET DU CV SONT REPRÉSENTÉS PAR DES POINTS.